ST-S707ES

SERVICE MANUAL

AEP Model
E Model

SPECIFICATIONS

FM tuner

Frequency range	87.5 - 108 MHz
Antenna terminals	75 Ω unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	(mono S/N 26 dB) 10.3 dBf, 0.9 µV/75 Ω (stereo S/N 46 dB) 38.5 dBf, 23 µV/75 Ω
Usable sensitivity	10.3 dBf, 0.9 µV/75 Ω (IHF)
Signal-to-noise ratio	(at 40 kHz deviation) 95 dB (mono) 86 dB (stereo)
Harmonic distortion	WIDE 0.008% (mono); 0.02% (stereo) NARROW 0.04% (mono); 0.07% (stereo)
Frequency response	15 Hz - 15 kHz, (±0.2 dB)
Separation	65 dB (at 1 kHz)
Selectivity	(at 400 kHz) WIDE 80 dB NARROW 90 dB (at 300 kHz) WIDE 45 dB NARROW 70 dB
Output	(at 40 kHz deviation) 600 mV: AEP, German, E model 750 mV: Italian model

AM tuner

Frequency range	AEP model MW: 531 - 1,602 kHz (9 kHz step) LW: 153 - 279 kHz (1 kHz step) German model AM: 531 - 1,602 kHz (9 kHz step) LW: 153 - 279 kHz (1 kHz step) Italian model AM: 522 - 1,611 kHz (9 kHz step) LW: 153 - 279 kHz (1 kHz step) E model AM: 531 - 1,602 kHz (9 kHz step) 530 - 1,710 kHz (10 kHz step)
Intermediate frequency	450 kHz
Usable sensitivity	(with AM loop antenna) MW: 300 µV/m LW: 1 mV/m
Signal-to-noise ratio	54 dB (50 mV/m, 999 kHz) 50 dB (50 mV/m, 216 kHz)
Harmonic distortion	0.3% (50 mV/m, 400 Hz)
Selectivity	50 dB (WIDE) 65 dB (NARROW)

General

Power requirements	AEP, German, Italian model 220 - 230 V AC, 50/60 Hz E model 110 -120 V AC or 220 - 240 V AC, 50/60 Hz
Power consumption	20 W
Dimensions	Approx. 470 mm (W) x 96 mm (H) x 372 mm (D) ($18^{5}/_{8}$ x $3^{7}/_{8}$ x $14^{3}/_{4}$ inches)
Mass	Approx. 6.4 kg (14 lb. 2 oz.)
Accessories supplied	Connecting cord (1); AM loop antenna (1); FM antenna (1) (Europe only); Short screw M4 x 8 (4)

Design and specifications are subject to change without notice.

FM STEREO/FM-AM TUNER

SONY®

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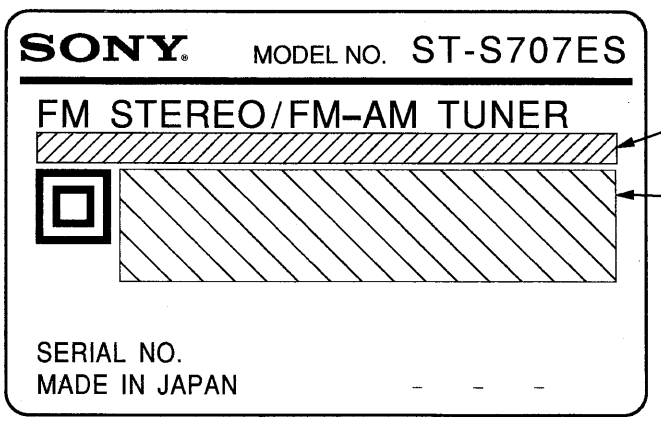
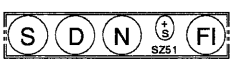
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

– MODEL IDENTIFICATION –
(Specification Label)



IT model: AC 220–230V ~ 50/60Hz
AEP model: AC 220–230V ~ 50/60Hz
G model: AC 220–230V ~ 50/60Hz
E model: AC 110–120V/220–240V ~ 50/60Hz

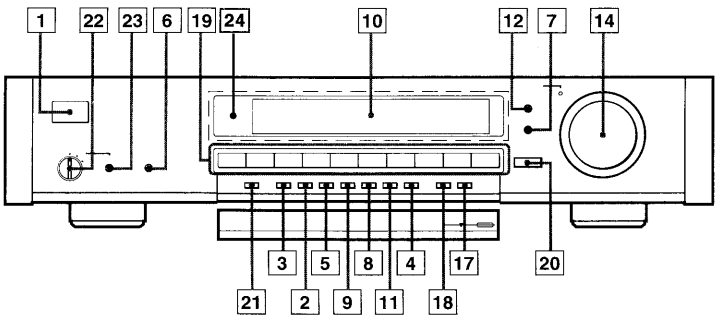
AEP model: 

G model:

IT, E model: No Printed

SECTION 1
GENERAL

This section is extracted from instruction manual.



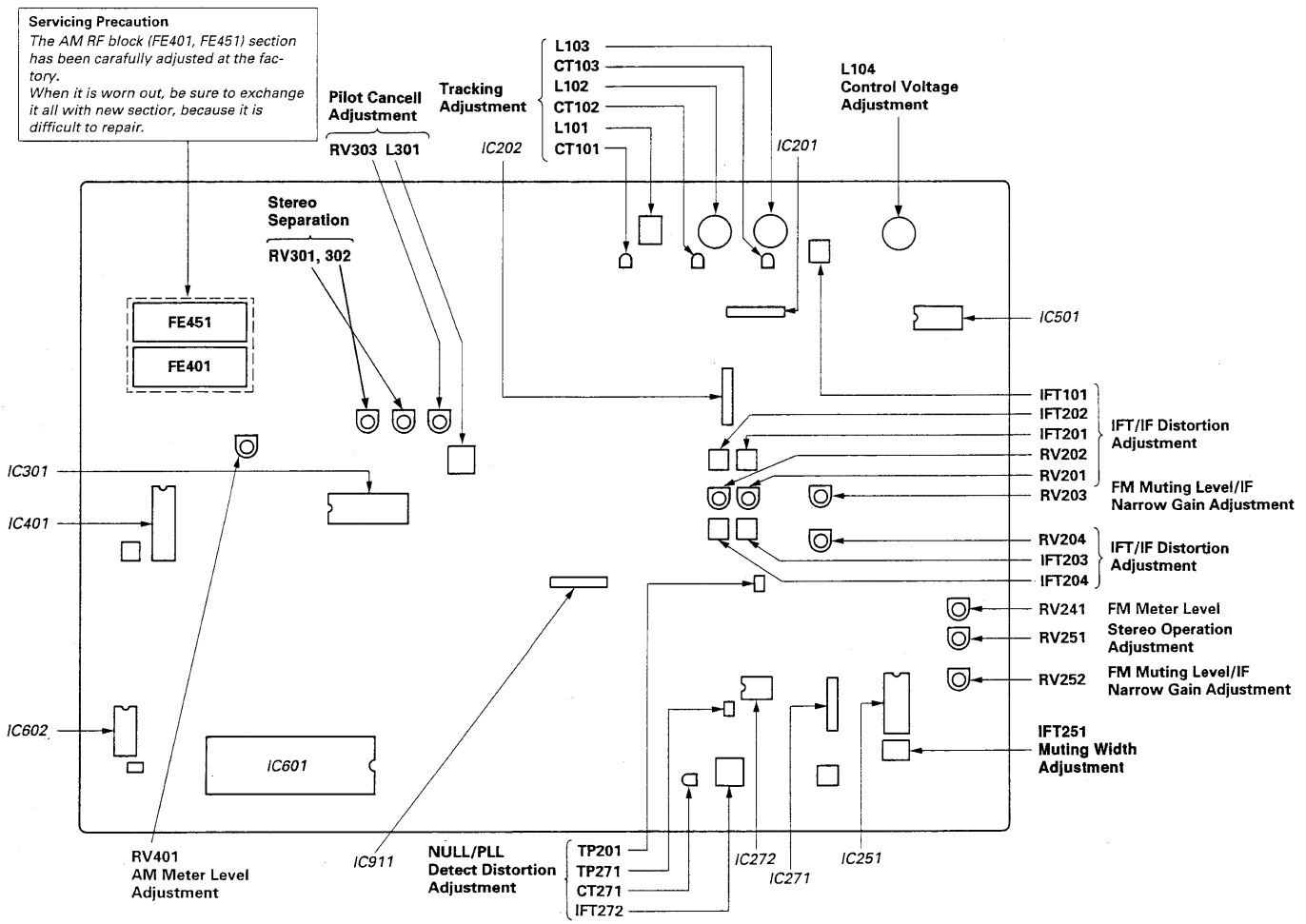
1 Power switch (12, 14, 24,)
2 ANT ATT button (22)
3 ANT button (22)
4 CHARACTER button (34)
5 IF BAND button (22)
6 DISPLAY button (28, 46)
7 DISPLAY MODE button (14)
8 FM MODE button (20)
9 MUTING button (20, 22)
10 Display window
11 TUNE MODE button (16, 18, 30, 32, 52)
12 TUNING/PRESET button (16, 18, 30, 32)
14 TUNING/CHARACTER/SELECT knob (16, 18, 26, 30, 32, 34, 52, 54)
17 MEMORY button (24, 26, 34, 36)
18 BAND button (16, 18)
19 Preset buttons (12, 14, 26, 28, 34, 36, 38)
20 SHIFT button (26, 28, 34, 36)
21 CAL TONE button (10)
22 PROGRAM knob (36, 38)
23 CHECK button (38)
24 REMOTE CONTROL RECEIVER

(The numbers in parenthesis indicate the page(s) where the control is described.)

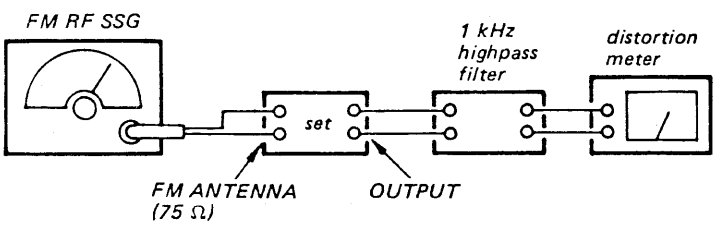
SECTION 2
ELECTRICAL ADJUSTMENTS

Notes: Perform adjustment in the order given.

• Parts location diagram relevant to the adjustment.



FM SECTION



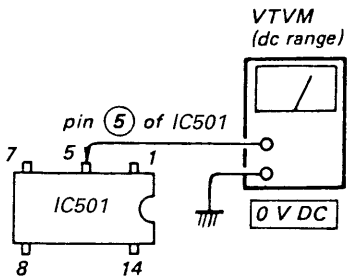
• Standard signals for adjustment.

FM RF Stereo Signal	FM RF Monaural Signal
Carrier frequency : 98 MHz Modulation : Audio 1 kHz, 16.25 kHz deviation (21.7%) Subchannel 16.25 kHz deviation (21.7%) Pilot 19 kHz, 7.5 kHz deviation (13.3%)	Carrier frequency : 98 MHz Modulation : Audio 1 kHz, 40 kHz deviation (53%)

Control Voltage Adjustment

Procedure:

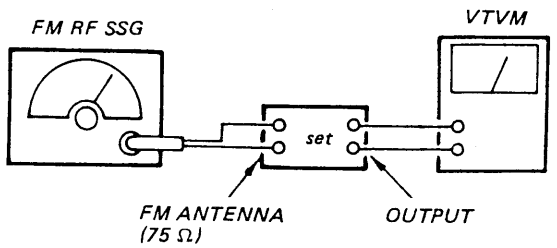
1. Turn the set to 108 MHz.
2. Adjust L104 for 21.0 ±0.2 V reading on the VTVM.
3. Tune the set to 87.5 MHz.
4. Confirm that the voltage reading on the VTVM is within 8.0 ±1.0V.



Tracking Adjustment

Setting:

IF BAND : NARROW



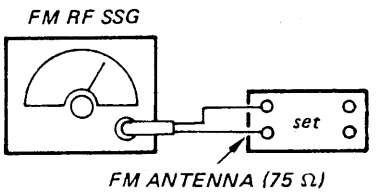
Procedure:

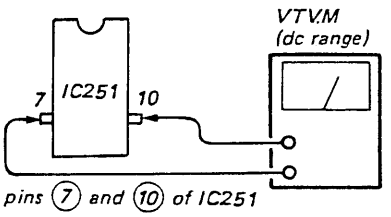
1. Tune the set to 108 MHz.
2. Adjust CT101, CT102 and CT103 for maximum reading on the VTVM.
3. Tune the set to 87.5 MHz.
4. Adjust L101, L102 and L103 for maximum reading on the VTVM.
5. Repeat the step 2 – 4 several times.

Muting Width Adjustment

Setting:

IF BAND : WIDE
MUTING switch : ON





Carrier frequency: *98 MHz*
Modulation: *FM RF Monaural signal*
Output level: *10 mV (80 dBμ)*

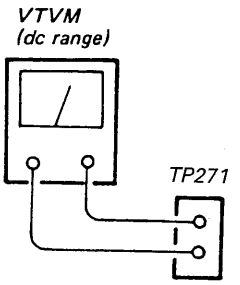
Procedure:

1. Tune the set to 98 MHz.
2. Adjust IFT251 for 0V reading on the VTVM.

NULL/PLL Detect Distortion Adjustment

Setting:

IF BAND : WIDE
MUTING switch: ON



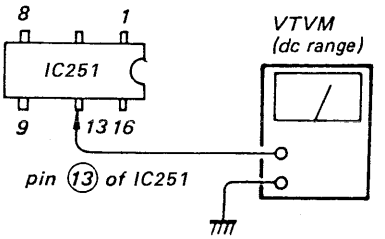
Procedure:

1. Tune the set to 98 MHz.
2. Short-circuit TP201 to the ground (The set turns into IF through state.)
3. Set the SSG output to 80 dBμ (10 mV).
4. Adjust IFT272 for 0 V reading on the VTVM (TP271). (Null adj.)
5. Adjust CT271 for minimum distortion reading on the distortion meter. (PLL Detect Distortion adj.)
6. Repeat the step 4 and 5 several times.
7. Remove the short circuit of TP201.

IFT/IF Distortion Adjustment

Setting:

IF BAND : WIDE
MUTING switch: OFF



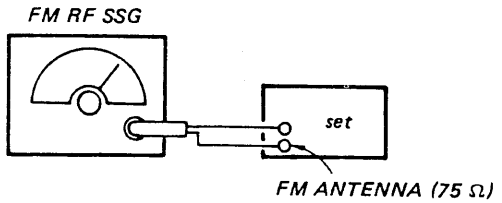
Procedure:

1. Tune the set to 98 MHz.
2. Turn RV201 and RV202 to fully clockwise.
3. Set the SSG output to 40 dBμ (100 μV) at monaural modulation mode.
4. Adjust IFT201 for maximum reading on the VTVM. (IF Distortion Pre adj.• MONO)
5. Set the SSG output to 40 dBμ (100 μV) at stereo modulation mode.
6. Adjust IFT202 for maximum reading on the VTVM. (IF Distortion Pre adj. • STEREO)
7. Adjust IFT101 for maximum reading on the VTVM (IFT adj.)
8. Set the SSG output to 80 dBμ (10 mV) at monaural modulation mode.
9. Turn RV201 and RV202 to mechanical center position.
10. Adjust IFT203 for the minimum distortion. (IF Distortion adj. • MONO)
11. Set the SSG output to 80 dBμ (10 mV) at stereo modulation mode. (Lch only)
12. Adjust IFT204 for the minimum distortion. (IF Distortion adj. • STEREO)
13. IF BAND: NARROW
14. Adjust RV204 for the minimum distortion. (IF Narrow Distortion adj.)

Stereo Operation Adjustment

Setting:

IF BAND : WIDE
MUTING switch: OFF



Carrier frequency: *98 MHz*
Modulation: *FM RF Stereo signal*
Output level: *10 μV (20 dB)*

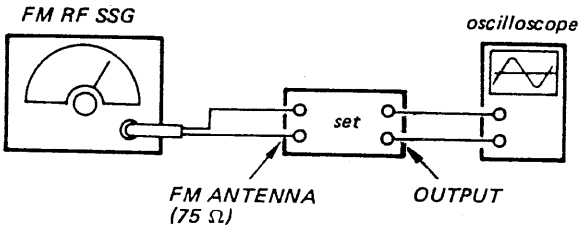
Procedure:

1. Tune the set to 98 MHz.
2. Adjust RV251 so that the STEREO indicator goes on.

FM Muting Level/IF Narrow Gain Adjustment

Setting:

IF BAND : WIDE
MUTING switch: ON



Carrier frequency: *98 MHz*
Modulation: *FM RF Monaural signal*
Output level: *12.6 μV (22 dB)*

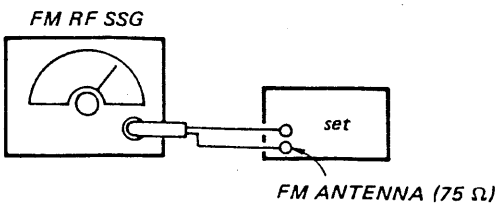
Procedure:

1. Tune the set to 98 MHz and adjust output level of signal generator at 25 dBμ (17.8 μV).
2. Turn RV252 at the position where the waveform suddenly appears on the oscilloscope (FM Muting level adj.)
3. IF BAND : NARROW
4. Turn RV203 at the position where the waveform suddenly appears on the oscilloscope (IF Narrow Gain adj.)

FM Meter Level Adjustment

Setting:

IF BAND : WIDE



Carrier frequency: *98 MHz*
Modulation: *FM RF Monaural signal*
Output level: *3 mV (70 dBμ)*

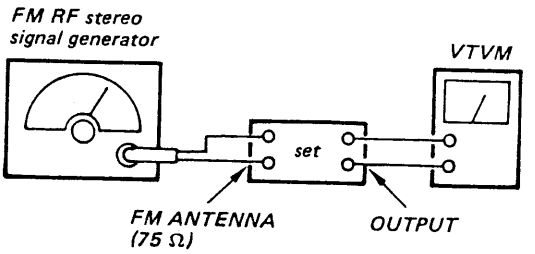
Procedure:

1. Tune the set to 98 MHz.
2. Adjust RV241 so that 1 – 10 indication bars light up on the signal meter.

Pilot Cancell Adjustment

Setting:

IF BAND : WIDE



Carrier frequency: *98 MHz*
Modulation: *pilot only*
Output level: *10 mV (80 dBμ)*

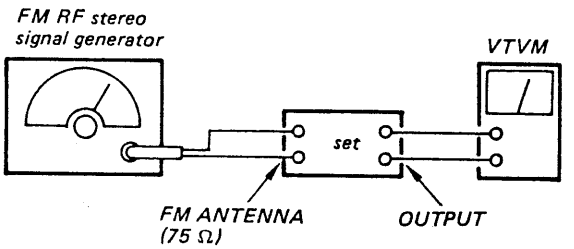
Procedure:

1. Turn the set to 98 MHz.
2. Adjust RV303 and L301 alternately for minimum reading on the VTVM and also tune the both channel of L-CH and R-CH balanced at this time.
3. Repeat the step 2 several times.

Stereo Separation Adjustment

Setting:

IF BAND : WIDE



Carrier frequency: *98 MHz*
Modulation: *FM RF stereo signal*
Output level: *10 mV (80 dBμ)*

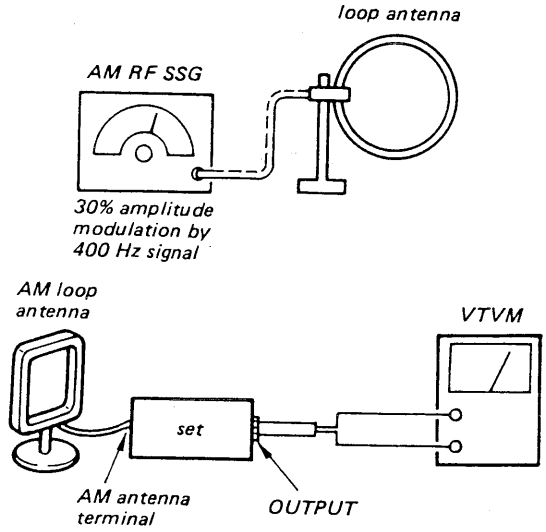
Procedure:

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV301 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV302 for minimum reading.

L-CH Stereo separation: Ⓐ – Ⓑ
R-CH Stereo separation: Ⓒ – Ⓓ
The separations of both channels should be equal.

AM SECTION

Setting:



AM Meter Level Adjustment

Setting:

Carrier frequency: *216 kHz*
Modulation: *400 Hz, 30% modulation*

Procedure:

1. Set AM RF signal generator so that the AM antenna input level becomes 74 dBμ/m (5 mV/m.)
2. Adjust RV401 so that 1 – 10 indication bars light up on the signal meter.

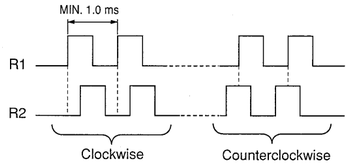
SECTION 3
DIAGRAMS

3-1. IC PIN FUNCTION DESCRIPTION

•IC601 SYSTEM CONTROLLER (μPD75116HGC-O11-AB8) PIN FUNCTION

Pin No.	Pin Name	I/O	ACTIVE	Description
1–4	KEY INPUT	I	H	Key matrix input
5–8	LED A-LED D	O		Not used (pull down)
9	GND	—		Power supply terminal (GND)
10	CLOCK START	I	H	Stop mode control input. (1) When there is no key input continuously for 2 seconds and the signal remains "L", the I/O port is maintained in the state immediately before and the stop mode is entered. PURE (pin 37) gose "H" and D701 Lights. (2) When there is a key input, releases the stop mode. PURE (pin 37) goes "L".
11	N.C.	I		Not used.
12	REMOCON	I		Remote control signal input.
13	R1	I		Rotary encoder rotation detect input. (※1)
14	R2	I		Rotary encoder rotation detect input. (※1)
15	$\overline{\text{AUTO STOP}}$	I	L	Auto stop signal input from IC251. "L" : when signal detect
16 17	N.C.	I		Not used.
18	$\overline{\text{PGM}}$	I	L	PROGRAM switch (S661) input. "L" : PROGRAM
19	$\overline{\text{KEY LOCK}}$	I	L	PROGRAM switch (S661) input. "L" : KEY LOCK
20	F-MUT	O	H	FM MUTING output. "H" : MUTE
21	TUN	O	H	FM MUTING SENS select output. "L" : STOP, "H" : TUNING
22	$\overline{\text{TUN}}$	O	L	AM muting output. "H" : STOP, "L" : TUNING
23	LATCH	O	H	Signal meterdriver (IC705) latch output.
24	N.C.	I		
25	DATA	O	H	Display data output to FL driver (IC501, 701–703, 705)
26	$\overline{\text{CLK}}$	O	L	Data transfer clock output to FL driver (IC501, 701–703, 705)
27	POWER	I	H	Power down detect input. "H" : normal, "L" : power down
28–31	SST4-SST1	O	H	Not used (pull up)
32	ANT	O	L	FM antenna select output. "L" : antenna "A". "H": antenna "B"
33	RF MODE	O	H	Antenna attenuator ON/OFF output. "L" : through, "H" : ATT
34	S-NAR	O	H	Not used (pull up)
35	$\overline{\text{W}}$/N	O	H	Wide/Narrow select output. "L" : WIDE, "H" : NARROW
36	FILTER	O	H	Not used (pull up)
37	BLD	O	H	Not used (pull up)
38	HI-B	O	H	HIGH BLEND switch (Q306) control output.
39	$\overline{\text{MONO}}$/AUTO	O	H	Auto stereo select switch. "H" : AUTO STEREO
40				Not used.
41	V_{DD}	—		Power supply terminal (+5V)
42	MUT	O	H	Line mute output. "H" : MUTE
43	CAL	O	L	CAL TONE ON/OFF output. "L" : CAL TONE
44	F/$\overline{\text{A}}$	O	H	Not used (open)
45	M/$\overline{\text{L}}$	O	H	MW/LW select output, "H" : MW, "L" : LW"
46	PURE	O	H	PURE LED (D701) ON/OFF output. "H" :ON (stop mode)
47	LATCH 1	O	H	FL driver (IC701) latch output
48	LATCH 2	O	H	FL driver (IC702) latch output
49	LATCH 3	O	H	FL driver (IC703) latch output
50	GRID	O	L	FL indicator tube grid control output (center grid 2G) (※2)
51	DIMMER	O	L	FL indicator tube grid control output (both sides grid 2G, 3G) (※2)
52•53	DIODE	O	H	Diode seitch output.
54	RESET	I	L	System RESET input. "L" : RESET
55	X2	O		Clock output
56	X1	I		Clock input (4.19 MHz)
57–64	KEY DI (S1)	O	H	Key matrix output

✽1 Rotary encoder ratation detect



✽2 When the DISPLAY MODE key is pressed, the FL display changes cyclically as follows.

→ Fully lit → Partially lit → Not lit →

The output ports change as follows.

	Fully lit	Parcially	Not lit
50 pin GRID	L	L	H
51 pin DIMMER	L	H	H

✽ When the BAND key is pressed, the output ports change cyclically as shown in the table below.

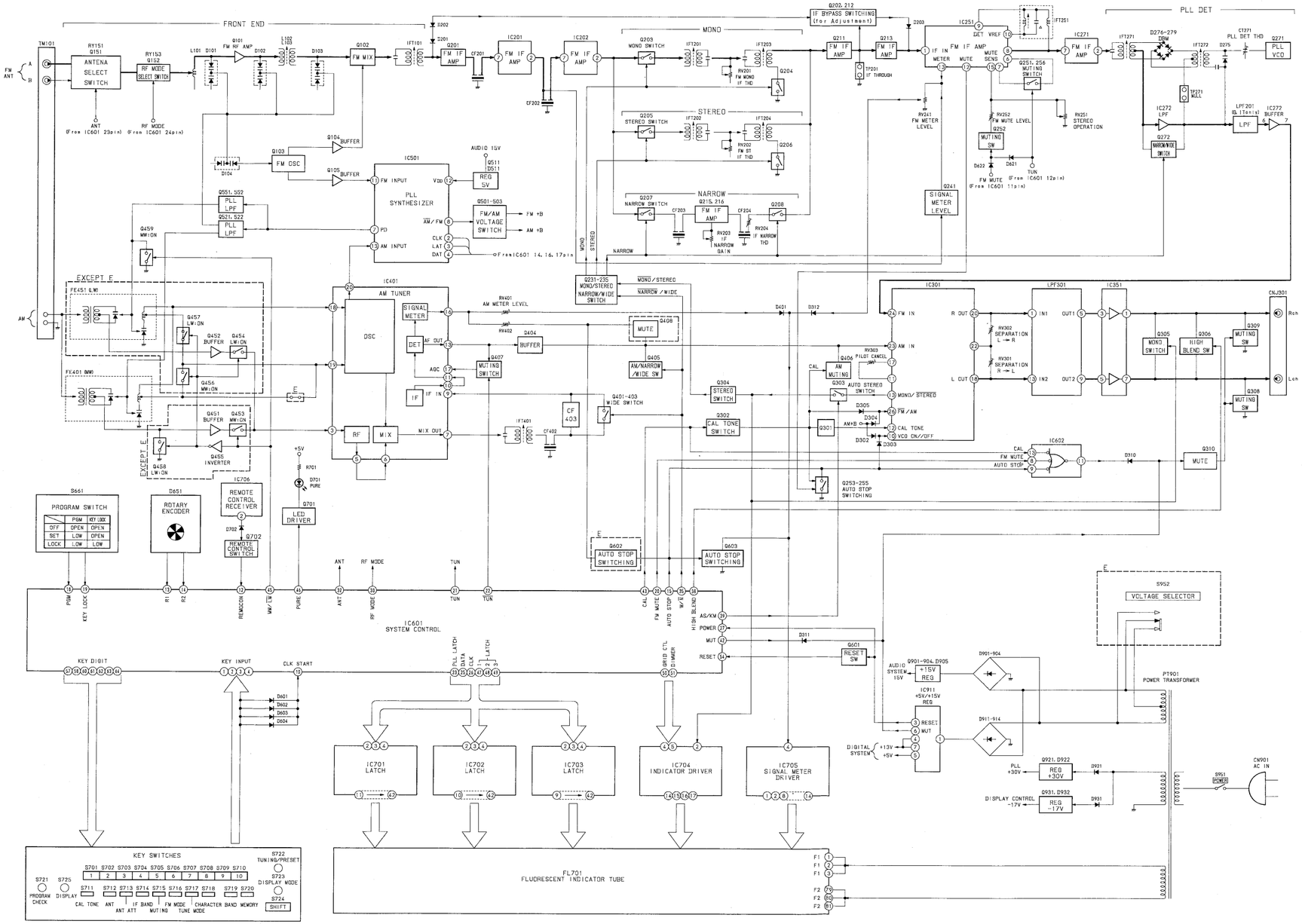
	FM	MW	LW
45 pin MW/$\overline{LW}$	H	L	L
IC501 CX7925 8 pin AO	H	L	L
IC501 CX7925 9 pin BO	DON'T CARE	H	L

- TEST MODE

  When the SHIFT key is held depressed and the power is turned on, all segments in the FL display light while the key is held, so simple checking can be done.

  When the SHIFT key is released, normal operation is restored.

3-2. BLOCK DIAGRAM

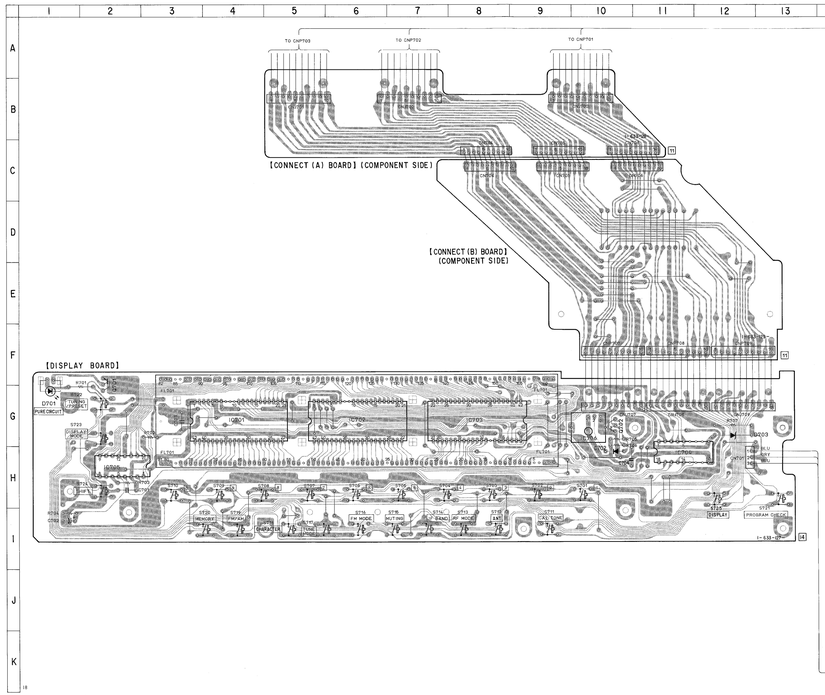


3-3. PRINTED WIRING BOARDS

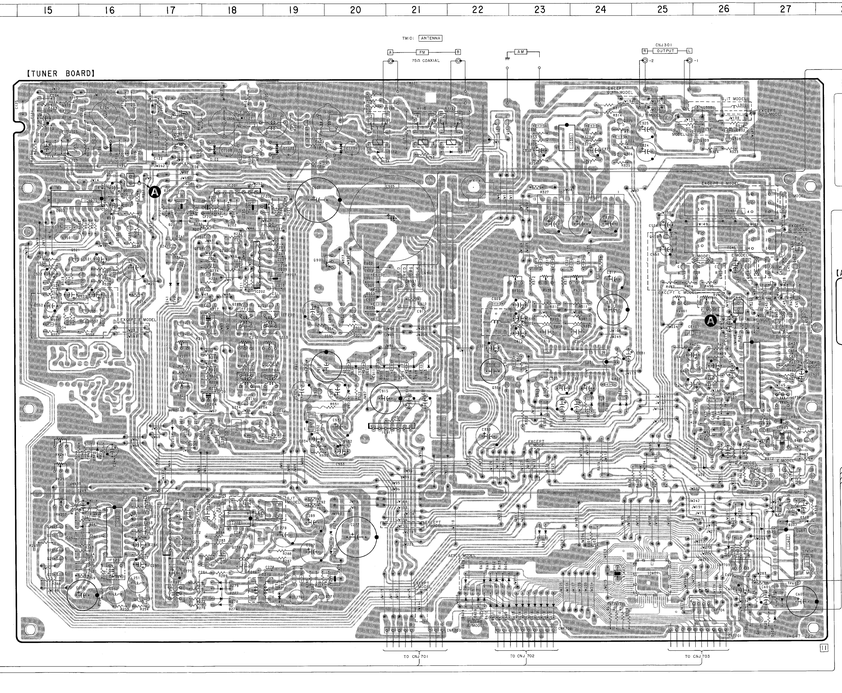
●See page 21 for Semiconductor Lead Layouts.

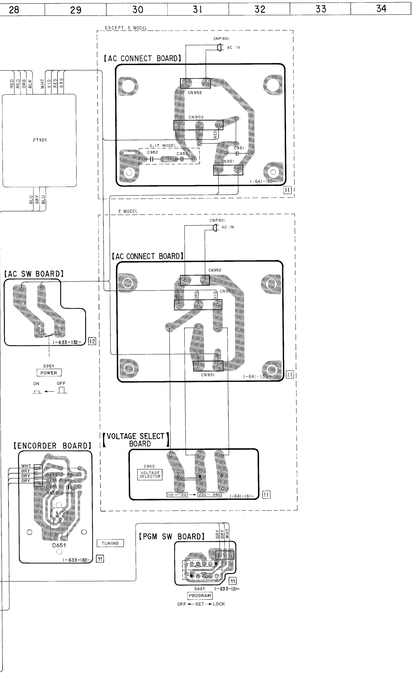
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D101	C-20	D651	H-31	Q234	E-18
D102	C-19	D701	G-1	Q235	E-18
D103	C-20	D702	H-10	Q241	D-17
D104	B-16	D703	H-12	Q251	J-17
D151	C-22	D901	E-20	Q252	I-15
D152	C-21	D902	E-20	Q253	I-15
D201	D-18	D903	E-20	Q254	I-15
D202	D-18	D904	E-20	Q255	I-15
D203	G-17	D905	F-20	Q256	J-15
D241	E-17	D911	G-21	Q271	J-20
D242	E-17	D912	G-21	Q272	I-18
D273	I-20	D913	F-22	Q301	F-23
D274	I-20	D914	F-21	Q302	H-28
D275	J-19	D921	F-20	Q303	F-23
D276	J-18	D922	G-20	Q304	F-22
D277	J-18	D931	F-21	Q305	C-25
D278	J-18	D932	G-20	Q306	C-24
D279	J-18	IC201	D-18	Q308	B-26
D301	G-24	IC202	E-19	Q309	B-25
D302	G-23	IC251	I-16	Q310	H-28
D303	G-23	IC271	I-17	Q401	H-28
D304	G-25	IC272	I-18	Q402	H-27
D305	G-25	IC301	F-24	Q403	H-27
D307	I-27	IC351	B-24	Q404	G-26
D310	H-27	IC401	F-27	Q405	G-27
D311	H-27	IC501	C-16	Q406	H-26
D312	H-16	IC601	J-25	Q407	G-26
D313	I-28	IC602	I-27	Q408	H-27
D401	F-25	IC701	G-4	Q451	E-27
D402	H-26	IC702	G-6	Q452	E-28
D511	D-16	IC703	G-8	Q453	E-27
D601	I-23	IC704	H-11	Q454	E-28
D602	I-23	IC705	H-2	Q455	E-26
D603	I-23	IC706	H-10	Q456	E-26
D604	I-23	IC911	G-21	Q457	E-26
D605	I-27	Q101	B-20	Q458	E-27
D606	I-27	Q102	B-18	Q459	D-25
D607	J-27	Q103	B-16	Q501	D-16
D608	J-27	Q104	B-17	Q502	D-17
D609	J-23	Q105	B-16	Q503	D-17
D610	J-23	Q151	B-23	Q511	E-16
D611	J-23	Q152	B-23	Q521	D-16
D612	J-23	Q201	C-17	Q522	E-16
D613	J-23	Q202	D-18	Q551	E-16
D614	J-23	Q203	E-18	Q552	F-16
D615	J-23	Q204	G-18	Q601	K-27
D616	J-23	Q205	E-19	Q602	H-27
D617	J-24	Q206	G-19	Q603	H-27
D618	J-24	Q207	E-18	Q701	G-2
D619	J-24	Q208	G-17	Q702	H-10
D620	I-27	Q211	G-19	Q901	D-20
D621	I-24	Q212	G-18	Q902	E-20
D622	I-24	Q213	G-18	Q903	E-20
D623	I-23	Q215	F-17	Q904	E-20
D624	I-22	Q216	F-17	Q921	F-20
D625	I-23	Q231	D-18	Q931	G-19
D626	J-22	Q232	D-18		
D628	J-22	Q233	D-18		



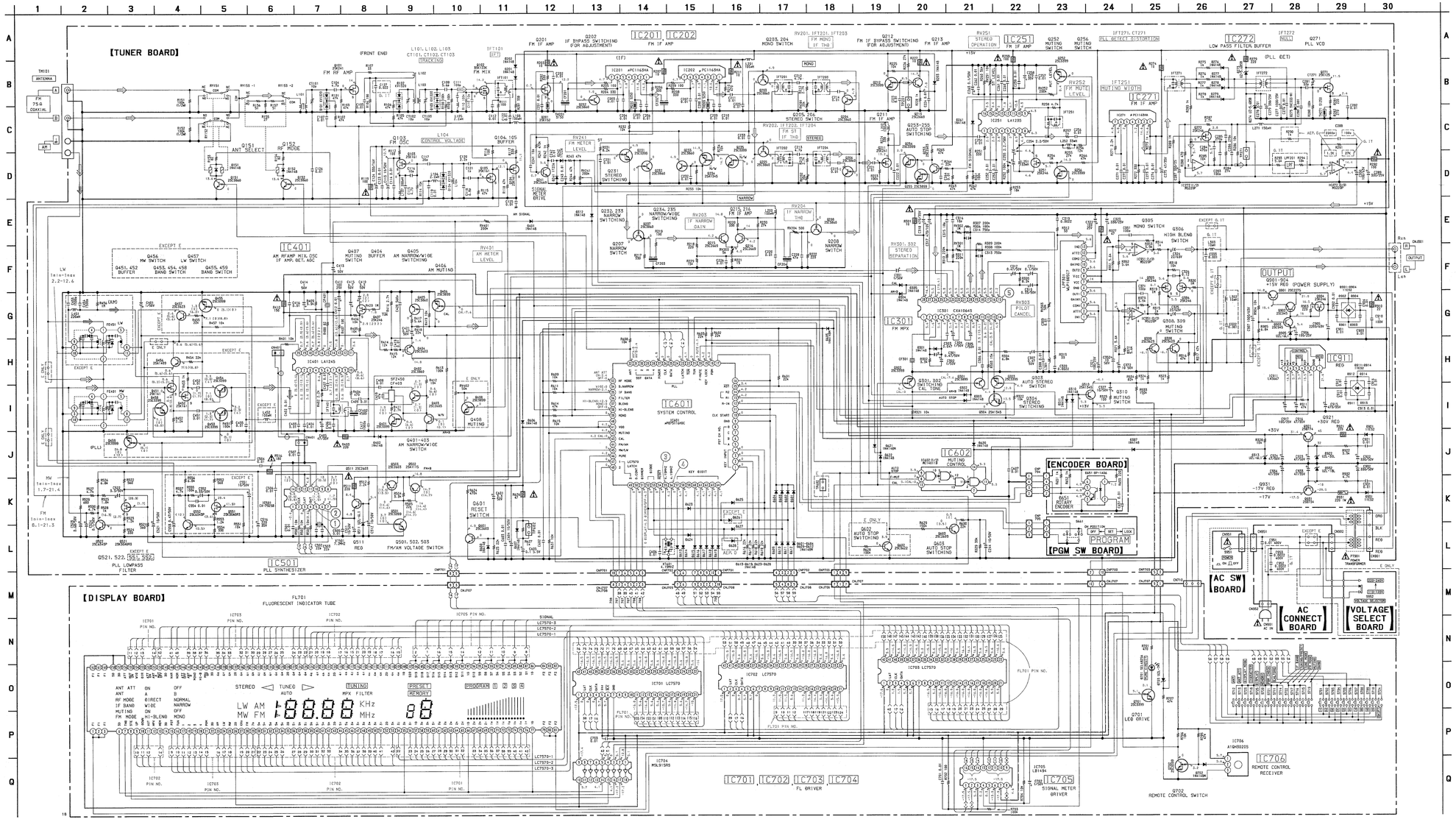
Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern on the side which is seen.





3-4. SCHEMATIC DIAGRAMS

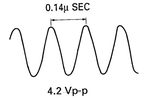
●See page 22, 23 for IC Block Diagrams.



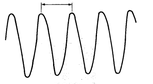
3-5. SCHEMATIC ON WAVEFORMS

① IC501 5pin

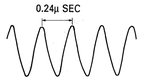
② IC501 6pin



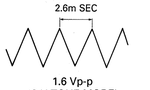
③ IC601 55pin



④ IC601 56pin



⑤ IC301 15pin



Note:

- All capacitors are in μF unless otherwise noted. pf: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- △ : internal component.
- : fusible resistor.
- : adjustment for repair.
- Voltages are taken with a VOM (50 kΩ/V). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.

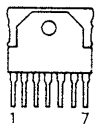
  : FM : MW : LW

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

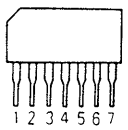
- Voltage are dc with respect to ground under no-signal (detuned) condition.
  no mark : FM ( ) : MW < > : LW

3-6. SEMICONDUCTOR LEAD LAYOUTS

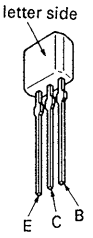
LA5667



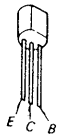
μPC1163HA



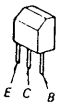
2SA1175-HFE
2SC2603-EF
2SC2669-OY
2SC2785-HFE
2SC3623A-LK
2SC3899
DTA144ES
DTC114TS
DTC144ES



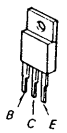
2SA1409-LK
2SC1815-GR



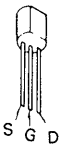
2SB734-34
2SD774-34



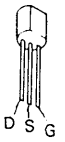
2SC2275-P



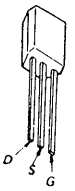
2SK125-3
2SK246-GR2
2SK30A-GR3



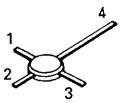
2SK152-3



2SK161-GR
2SK241-Y

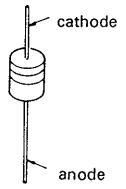


3SK122K

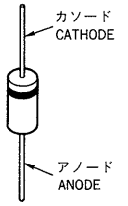


1. GATE 2
2. GATE 1
3. SOURCE
4. DRAIN

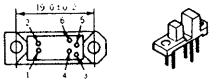
11ES2
1T22A
HZS30-2L
HZS6A1L
UZL-7M1



1N4148M
UZ-5.6BSB
UZL-18L

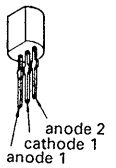


GP-1A06

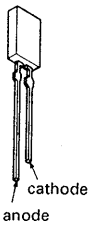


1. anode
2. cathode
3. GND
4. V_{O2}
5. V_{O1}
6. Vcc

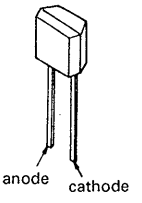
KV1320



SEL4825A-C

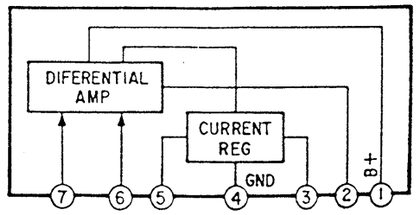


SVC333-M1-SONY

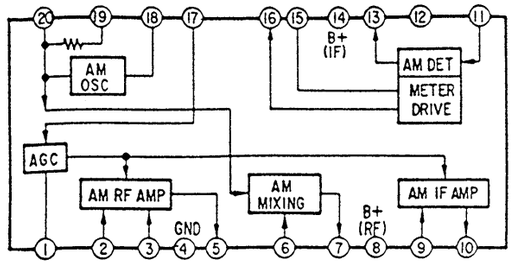


3-7. IC BLOCK DIAGRAMS

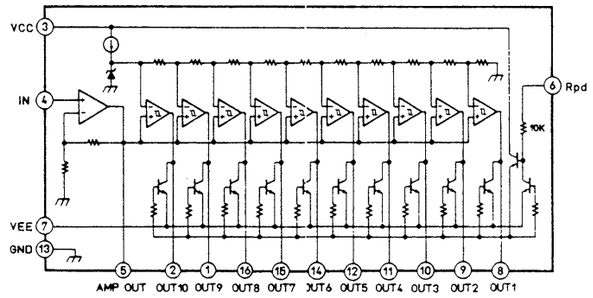
IC201, 202, 271 μPC1163HA



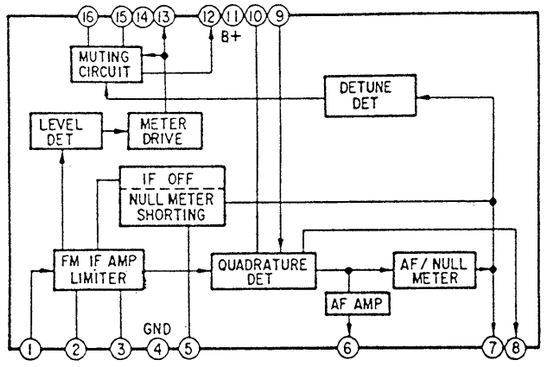
IC401 LA1245



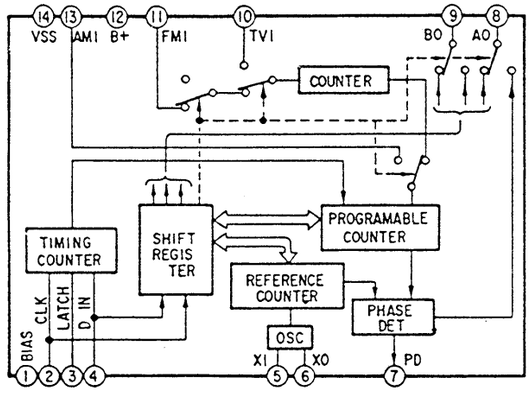
IC705 LB1494



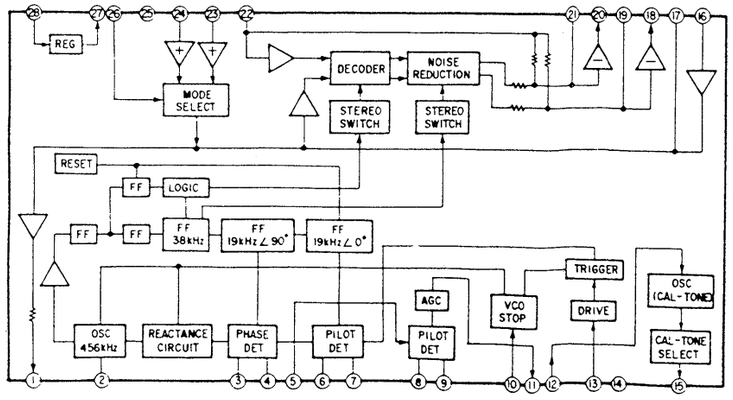
IC251 LA1235



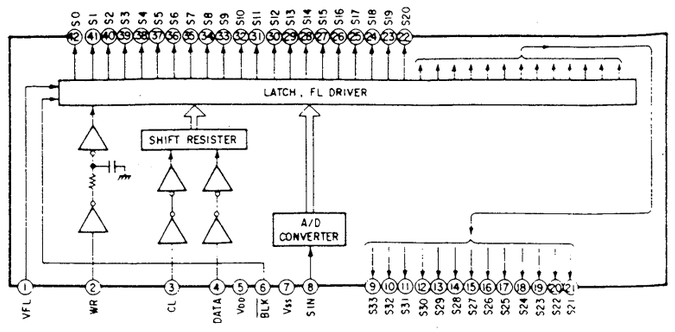
IC501 CX-7925B



IC301 CXA1064S



IC701, 702, 703 LC7570



SECTION 4
EXPLODED VIEWS

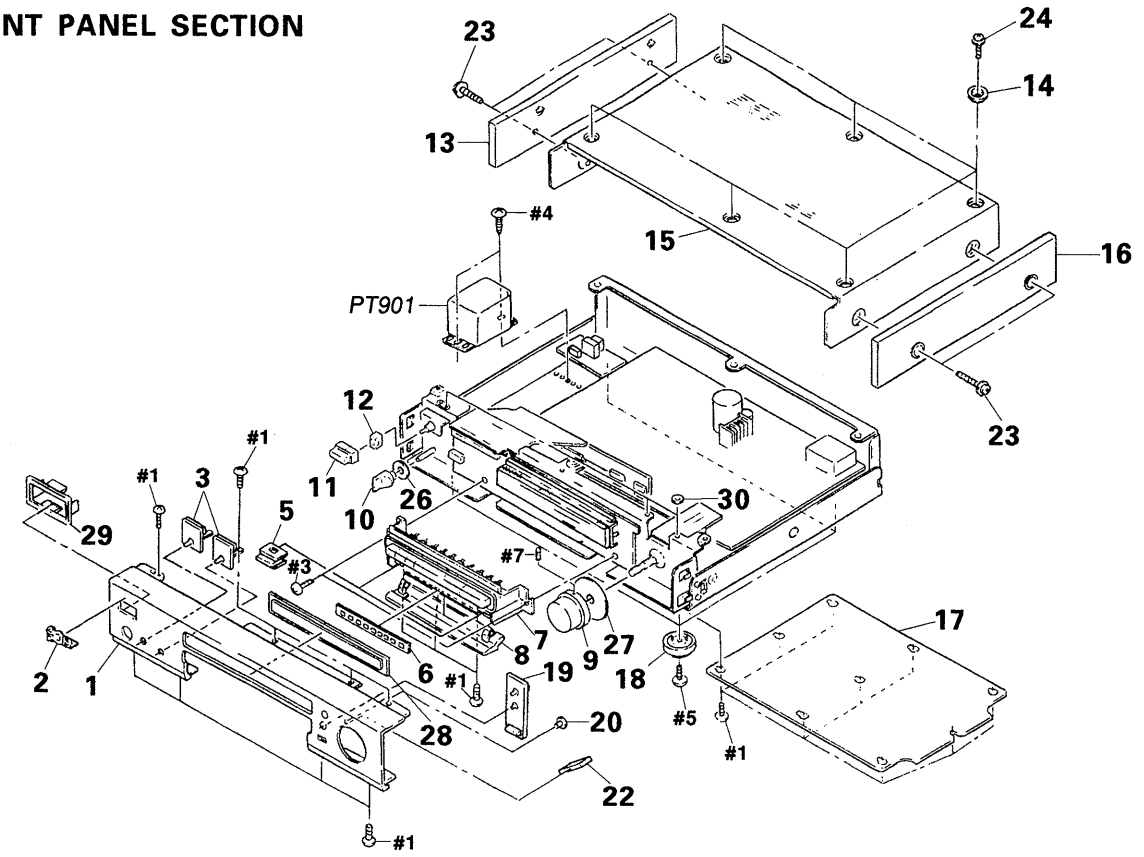
NOTE:

- -xx,-x mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)...(RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

- Abbreviations
  G : German
  IT : Italian

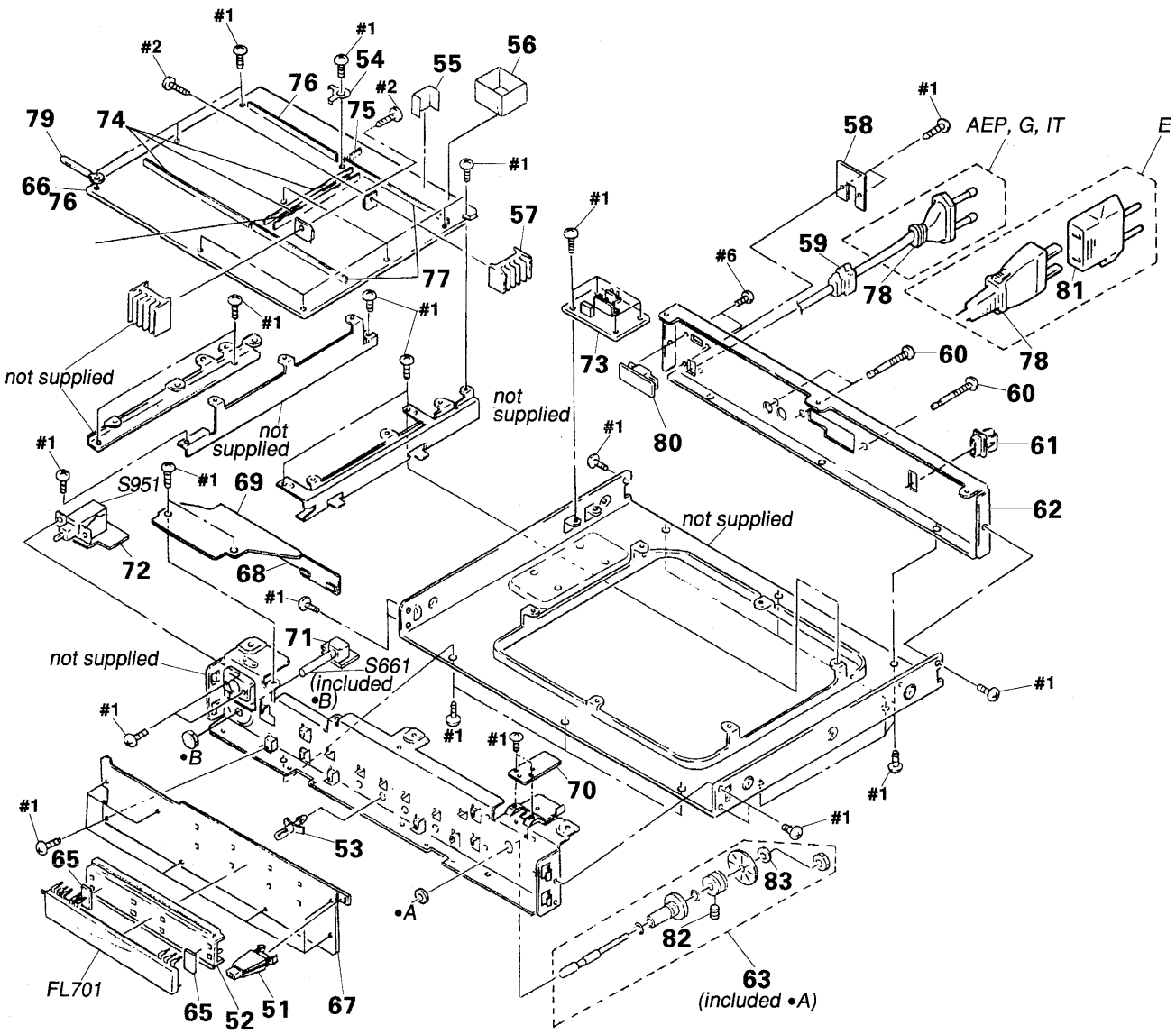
4-1. FRONT PANEL SECTION



Ref.No.	Part No.	Description	Remark
1	4-958-260-01	PANEL, FRONT (BLACK)	
1	4-958-260-11	PANEL, FRONT (GOLD) (AEP,G)	
2	4-942-568-01	EMBLEM (NO.5), SONY (BLACK)	
2	4-942-568-11	EMBLEM (NO.5), SONY (GOLD) (AEP,G)	
3	X-4886-042-1	BUTTON (A) ASSY (BLACK)	
3	X-4941-920-1	BUTTON (A) ASSY (GOLD) (AEP,G)	
5	1-452-419-21	MAGNET	
6	4-923-475-11	PLATE, ORNAMENTAL (BLACK)	
6	4-923-475-21	PLATE, ORNAMENTAL (GOLD) (AEP,G)	
7	X-4886-044-1	ESCUTCHEON ASSY, PANEL (BLACK)	
7	X-4941-922-1	ESCUTCHEON ASSY, PANEL (GOLD) (AEP,G)	
8	X-4943-636-1	LID ASSY (B) (BLACK)	
8	X-4943-637-1	LID ASSY (N) (GOLD) (AEP,G)	
9	4-958-264-01	KNOB (BLACK)	
9	4-958-264-11	KNOB (GOLD) (AEP,G)	
10	X-4943-846-1	KNOB ASSY (B) (BLACK)	
10	X-4943-847-1	KNOB ASSY (B) (GOLD) (AEP,G)	
11	4-908-046-01	KNOB, SQUARE (BLACK)	
11	4-908-046-81	KNOB, SQUARE (GOLD) (AEP,G)	
12	4-864-307-00	RING	
13	X-4886-045-1	PANEL (L) ASSY, SIDE (BLACK) (AEP,E,IT)	
13	X-4941-416-1	PANEL (L) ASSY, SIDE (BLACK) (G)	
13	X-4941-923-1	PANEL (L) ASSY, SIDE (GOLD) (AEP,G)	
14	4-923-474-01	RING, ORNAMENTAL (BLACK)	

Ref.No.	Part No.	Description	Remark
14	4-923-474-11	RING, ORNAMENTAL (GOLD) (AEP,G)	
15	4-935-802-11	CASE (BLACK)	
*15	4-935-802-21	CASE (GOLD) (AEP,G)	
16	X-4886-046-1	PANEL (R) ASSY, SIDE (BLACK) (AEP,E,IT)	
16	X-4941-417-1	PANEL (R) ASSY, SIDE (BLACK) (G)	
16	X-4941-924-1	PANEL (R) ASSY, SIDE (GOLD) (AEP,G)	
*17	4-908-036-11	PLATE, BOTTOM	
18	X-3304-944-1	FOOT ASSY (BLACK)	
18	X-3363-489-1	FOOT ASSY (GOLD) (AEP,G)	
19	X-4886-041-1	BUTTON (3 GANG) ASSY (BLACK)	
19	X-4941-919-1	BUTTON (3 GANG) ASSY (GOLD) (AEP,G)	
20	4-931-646-01	LENS, LED	
22	4-923-477-01	PLATE, LIGHT INTERCEPTION	
23	4-933-446-01	SCREW (SIDE PANEL)	
24	3-704-366-01	SCREW (CASE) (M3X8) (BLACK)	
24	3-704-366-11	SCREW (CASE) (M3X8) (GOLD) (AEP,G)	
26	3-533-938-00	CLOTH	
27	4-935-807-01	CLOTH, BLIND	
28	4-923-492-11	WINDOW, DISPLAY	
29	4-908-044-11	ESCUTCHEON, POWER KNOB (BLACK)	
29	4-908-044-21	ESCUTCHEON, POWER KNOB (GOLD) (AEP,G)	
*30	4-309-378-00	SPACER	
⚠PT901	1-450-409-11	TRANSFORMER, POWER (AEP,G,IT)	
⚠PT901	1-450-410-11	TRANSFORMER, POWER (E)	

4-2. CHASSIS SECTION



Ref.No.	Part No.	Description	Remark
*51	3-304-605-11	HOLDER (NO.1), LED	
*52	4-923-499-01	HOLDER (FL)	
*53	3-703-353-01	SUPPORT, PC BOARD	
*54	3-346-266-21	PLATE, GROUND	
*55	4-911-325-01	PLATE (A), SHIELD	
*56	2-287-441-01	PLATE, SHIELD	
*57	4-921-402-01	HEAT SINK	
*58	4-923-873-01	BRACKET, CORD STOPPER	
59	2-352-626-01	BUSHING, CORD (E)	
*59	3-703-244-00	BUSHING (2104), CORD (AEP,G,IT)	
60	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
*61	4-908-019-01	HOLDER (A), ANTENNA	
*62	4-923-498-01	PANEL, BACK (BLACK) (AEP,G,IT)	
*62	4-923-498-41	PANEL, BACK (GOLD) (AEP,G)	
*62	4-923-498-51	PANEL, BACK (BLACK) (E)	
*63	X-4886-023-1	PLATE ASSY, SLIT	
*65	4-923-479-01	SPACER	
*66	A-4360-724-A	TUNER BOARD, COMPLETE (AEP)	
*66	A-4360-726-A	TUNER BOARD, COMPLETE (G)	
*66	A-4360-727-A	TUNER BOARD, COMPLETE (IT)	
*66	A-4360-728-A	TUNER BOARD, COMPLETE (E)	
*67	A-4360-725-A	DISPLAY BOARD, COMPLETE	

Ref.No.	Part No.	Description	Remark
*68	1-633-128-11	CONNECT (A) BOARD	
*69	1-633-129-11	CONNECT (B) BOARD	
*70	1-633-130-11	ENCODER BOARD	
*71	1-633-131-11	PGM SW BOARD	
*72	1-633-132-11	AC SW BOARD	
*73	1-641-160-11	AC CONNECT BOARD (AEP,G,IT)	
*73	1-641-159-11	AC CONNECT BOARD (E)	
*74	1-560-242-51	BUS BAR 7P	
*75	1-560-242-61	BUS BAR 2P	
*76	1-560-242-71	BUS BAR 6P	
*77	1-560-242-91	BUS BAR 10P	
⚠78	1-559-297-31	CODE, POWER (E)	
⚠78	1-574-383-11	CORD, POWER (AEP,G,IT)	
79	3-701-822-01	HOLDER, WIRE	
*80	1-641-161-11	VOLTAGE SELECT BOARD (E)	
⚠81	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
82	3-701-506-01	SET SCREW, DOUBLE POINT 3X4	
83	3-659-350-00	POLY SLIDER (3.4. DIA.)	
FL701	1-519-558-11	INDICATOR TUBE, FLUORESCENT	
S661	1-571-333-11	SWITCH, ROTARY	
⚠S951	1-572-267-21	SWITCH, PUSH (AC POWER) (1 KEY)	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

SECTION 5
ELECTRICAL PARTS LIST

AC CONNECT | **AC SW** | **CONNECT (A)** | **CONNECT (B)** | **DISPLAY**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA··· : μA···, uPA··· : μPA···,
  uPB··· : μPB···, uPC··· : μPC···, uPD··· : μPD···
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- Abbreviations
  G : German
  IT : Italian

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description			Remark
*	1-641-160-11	AC CONNECT BOARD (AEP, German, Italian)			
*	1-641-159-11	AC CONNECT BOARD (E)			
		**********			
		< CAPACITOR >			
C951	1-161-744-00	CERAMIC	0.01uF		400V
C952	1-161-742-00	CERAMIC	0.0022uF	20%	400V
					(German, Italian)
C953	1-161-742-00	CERAMIC	0.0022uF	20%	400V
					(German, Italian)
		< CONNECTOR >			
*CN902	1-564-687-11	PIN, CONNECTOR 3P			
*CN952	1-564-321-00	PIN, CONNECTOR 2P			
**********					
*	1-633-132-11	AC SW BOARD			
		**********			
		< SWITCH >			
⚠S951	1-572-267-21	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)			
**********					
*	1-633-128-11	CONNECT (A) BOARD			
		**********			
		< CONNECTOR >			
*CNJ701	1-565-486-11	CONNECTOR, BOARD TO BOARD 10P			
*CNJ702	1-565-486-11	CONNECTOR, BOARD TO BOARD 10P			
*CNJ703	1-565-486-11	CONNECTOR, BOARD TO BOARD 10P			
**********					
*	1-633-129-11	CONNECT (B) BOARD			
		**********			
		< CONNECTOR >			
CN704	1-564-610-41	CONNECTOR, BOARD TO BOARD			
CN705	1-564-610-41	CONNECTOR, BOARD TO BOARD			
CN706	1-564-610-41	CONNECTOR, BOARD TO BOARD			
CNP707	1-508-693-00	CONNECTOR PIN 10P			
CNP708	1-508-693-00	CONNECTOR PIN 10P			
CNP709	1-508-693-00	CONNECTOR PIN 10P			
**********					
*	A-4360-725-A	DISPLAY BOARD			
		**********			
*	3-304-605-11	HOLDER (NO.1), LED			
*	4-923-479-01	SPACER			
*	4-923-499-01	HOLDER (FL)			
		< CAPACITOR >			
C701	1-161-379-00	CERAMIC	0.01uF	20%	25V
C702	1-124-903-11	ELECT	1uF	20%	50V
C703	1-161-379-00	CERAMIC	0.01uF	20%	25V
		< CONNECTOR >			
*CN710	1-508-878-00	BASE POST 3P			
*CNJ707	1-565-486-11	CONNECTOR, BOARD TO BOARD 10P			
*CNJ708	1-565-486-11	CONNECTOR, BOARD TO BOARD 10P			
*CNJ709	1-565-486-11	CONNECTOR, BOARD TO BOARD 10P			
		< DIODE >			
D701	8-719-304-52	LED	SEL4825A-C (PURE CIRCUIT)		
D702	8-719-987-63	DIODE	1N4148M		
D703	8-719-000-84	DIODE	UZL-7M1		
		< FLUORESCENT INDICATOR >			
FL701	1-519-558-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC701	8-759-820-08	IC	LC7570		
IC702	8-759-820-08	IC	LC7570		
IC703	8-759-820-08	IC	LC7570		
IC704	8-759-909-15	IC	MSL915RS		
IC705	8-759-801-57	IC	LB1494		
IC706	8-749-920-59	IC	A1QH3020S		
		< TRANSISTOR >			
Q701	8-729-900-89	TRANSISTOR	DTC144ES		
Q702	8-729-900-89	TRANSISTOR	DTC144ES		

DISPLAY ENCODER PGM SW TUNER

Ref.No.	Part No.	Description			Remark
		< RESISTOR >			
R701	1-249-413-11	CARBON	470	5% 1/4W	
R702	1-249-405-11	CARBON	100	5% 1/4W	
R703	1-249-441-11	CARBON	100K	5% 1/4W	
R704	1-249-429-11	CARBON	10K	5% 1/4W	
R705	1-249-437-11	CARBON	47K	5% 1/4W	
R706	1-249-429-11	CARBON	10K	5% 1/4W	
R707	1-249-437-11	CARBON	47K	5% 1/4W	
		< SWITCH >			
S701	1-554-303-21	SWITCH, TACTILE (1)			
S702	1-554-303-21	SWITCH, TACTILE (2)			
S703	1-554-303-21	SWITCH, TACTILE (3)			
S704	1-554-303-21	SWITCH, TACTILE (4)			
S705	1-554-303-21	SWITCH, TACTILE (5)			
S706	1-554-303-21	SWITCH, TACTILE (6)			
S707	1-554-303-21	SWITCH, TACTILE (7)			
S708	1-554-303-21	SWITCH, TACTILE (8)			
S709	1-554-303-21	SWITCH, TACTILE (9)			
S710	1-554-303-21	SWITCH, TACTILE (0)			
S711	1-554-303-21	SWITCH, TACTILE (CAL TONE)			
S712	1-554-303-21	SWITCH, TACTILE (ANT)			
S713	1-554-303-21	SWITCH, TACTILE (ANT ATT)			
S714	1-554-303-21	SWITCH, TACTILE (IF BAND)			
S715	1-554-303-21	SWITCH, TACTILE (MUTING)			
S716	1-554-303-21	SWITCH, TACTILE (FM MODE)			
S717	1-554-303-21	SWITCH, TACTILE (TUNE MODE)			
S718	1-554-303-21	SWITCH, TACTILE (CHARACTER)			
S719	1-554-303-21	SWITCH, TACTILE (BAND)			
S720	1-554-303-21	SWITCH, TACTILE (MEMORY)			
S721	1-554-303-21	SWITCH, TACTILE (PROGRAM CHECK)			
S722	1-554-303-21	SWITCH, TACTILE (TUNING/PRESET)			
S723	1-554-303-21	SWITCH, TACTILE (DISPLAY MODE)			
S724	1-554-303-21	SWITCH, TACTILE (SHIFT)			
S725	1-554-303-21	SWITCH, TACTILE (DISPLAY)			
**********					
*	1-633-130-11	ENCODER BOARD			
		**********			
		< CAPACITOR >			
C651	1-161-379-00	CERAMIC	0.01uF	20% 25V	
		< PHOTO INTERRUPTER >			
D651	8-719-913-37	PHOTO INTERRUPTER GP-1A06			

Ref.No.	Part No.	Description			Remark
		< RESISTOR >			
R651	1-249-417-11	CARBON	1K	5% 1/4W	
R652	1-249-417-11	CARBON	1K	5% 1/4W	
R653	1-249-409-11	CARBON	220	5% 1/4W	
**********					
*	1-633-131-11	PGM SW BOARD			
		**********			
		< SWITCH >			
S661	1-571-333-11	SWITCH, ROTARY (PROGRAM)			
**********					
*	A-4360-724-A	TUNER BOARD, COMPLETE (AEP)			
*	A-4360-726-A	TUNER BOARD, COMPLETE (German)			
*	A-4360-727-A	TUNER BOARD, COMPLETE (Italian)			
*	A-4360-728-A	TUNER BOARD, COMPLETE (E)			
		**********			
*	1-560-242-51	BUS BAR 7P			
*	1-560-242-61	BUS BAR 2P			
*	1-560-242-71	BUS BAR 6P			
*	1-560-242-91	BUS BAR 10P			
*	2-287-441-01	PLATE, SHIELD			
*	3-346-266-21	PLATE, GROUND			
*	4-911-325-01	PLATE (A), SHIELD			
*	4-921-402-01	HEAT SINK			
	7-682-548-09	SCREW +B 3X8			
		< CAPACITOR >			
C104	1-162-195-31	CERAMIC	4.7PF	10% 50V	
C105	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C107	1-164-096-11	CERAMIC	0.01uF	50V	
C109	1-162-196-31	CERAMIC	5.6PF	10% 50V	
C110	1-162-199-31	CERAMIC	10PF	5% 50V	
C111	1-162-282-31	CERAMIC	100PF	10% 50V	
C112	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C113	1-126-059-11	ELECT	10uF	20% 50V	
C114	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C115	1-162-195-31	CERAMIC	4.7PF	10% 50V	
C116	1-162-199-31	CERAMIC	10PF	5% 50V	
C117	1-162-206-31	CERAMIC	20PF	5% 50V	
C118	1-162-197-31	CERAMIC	6.8PF	10% 50V	
C119	1-164-096-11	CERAMIC	0.01uF	50V	
C120	1-162-191-31	CERAMIC	2.2PF	10% 50V	
C121	1-162-187-31	CERAMIC	1PF	20% 50V	
C122	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C123	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C124	1-124-119-00	ELECT	330uF	20% 16V	
C125	1-161-379-00	CERAMIC	0.01uF	20% 25V	

TUNER

Ref.No.	Part No.	Description			Remark
C126	1-161-379-00	CERAMIC	0.01uF	20%	25V
C127	1-101-005-00	CERAMIC	22000PF		50V
					(German, Italian)
C201	1-161-379-00	CERAMIC	0.01uF	20%	25V
C202	1-161-379-00	CERAMIC	0.01uF	20%	25V
C203	1-161-379-00	CERAMIC	0.01uF	20%	25V
C204	1-161-379-00	CERAMIC	0.01uF	20%	25V
C205	1-161-379-00	CERAMIC	0.01uF	20%	25V
C206	1-161-379-00	CERAMIC	0.01uF	20%	25V
C207	1-161-379-00	CERAMIC	0.01uF	20%	25V
C208	1-161-379-00	CERAMIC	0.01uF	20%	25V
C209	1-161-379-00	CERAMIC	0.01uF	20%	25V
C210	1-161-379-00	CERAMIC	0.01uF	20%	25V
C211	1-161-379-00	CERAMIC	0.01uF	20%	25V
C212	1-162-195-31	CERAMIC	4.7PF	10%	50V
C213	1-162-195-31	CERAMIC	4.7PF	10%	50V
C214	1-161-379-00	CERAMIC	0.01uF	20%	25V
C215	1-161-379-00	CERAMIC	0.01uF	20%	25V
C220	1-161-379-00	CERAMIC	0.01uF	20%	25V
C221	1-161-379-00	CERAMIC	0.01uF	20%	25V
C222	1-161-379-00	CERAMIC	0.01uF	20%	25V
C223	1-161-379-00	CERAMIC	0.01uF	20%	25V
C224	1-161-379-00	CERAMIC	0.01uF	20%	25V
C225	1-161-379-00	CERAMIC	0.01uF	20%	25V
C226	1-161-379-00	CERAMIC	0.01uF	20%	25V
C228	1-162-215-31	CERAMIC	47PF	5%	50V
C231	1-161-379-00	CERAMIC	0.01uF	20%	25V
C232	1-161-379-00	CERAMIC	0.01uF	20%	25V
C233	1-161-379-00	CERAMIC	0.01uF	20%	25V
C241	1-162-199-31	CERAMIC	10PF	5%	50V
C242	1-161-379-00	CERAMIC	0.01uF	20%	25V
C243	1-161-379-00	CERAMIC	0.01uF	20%	25V
C244	1-126-059-11	ELECT	10uF	20%	50V
C251	1-161-379-00	CERAMIC	0.01uF	20%	25V
C252	1-161-379-00	CERAMIC	0.01uF	20%	25V
C253	1-161-379-00	CERAMIC	0.01uF	20%	25V
C254	1-124-925-11	ELECT	2.2uF	20%	100V
C255	1-124-925-11	ELECT	2.2uF	20%	100V
C256	1-161-379-00	CERAMIC	0.01uF	20%	25V
C257	1-161-379-00	CERAMIC	0.01uF	20%	25V
C258	1-126-104-11	ELECT	470uF	20%	35V
C259	1-161-379-00	CERAMIC	0.01uF	20%	25V
C260	1-161-379-00	CERAMIC	0.01uF	20%	25V
C261	1-161-379-00	CERAMIC	0.01uF	20%	25V
C262	1-161-379-00	CERAMIC	0.01uF	20%	25V
C263	1-124-463-00	ELECT	0.1uF	20%	50V
C264	1-161-379-00	CERAMIC	0.01uF	20%	25V
C271	1-161-379-00	CERAMIC	0.01uF	20%	25V
C272	1-161-379-00	CERAMIC	0.01uF	20%	25V

Ref.No.	Part No.	Description			Remark
C273	1-161-379-00	CERAMIC	0.01uF	20%	25V
C274	1-161-379-00	CERAMIC	0.01uF	20%	25V
C275	1-126-051-11	ELECT	47uF	20%	35V
C276	1-161-379-00	CERAMIC	0.01uF	20%	25V
C277	1-124-557-11	ELECT	1000uF	20%	25V
C278	1-161-379-00	CERAMIC	0.01uF	20%	25V
C279	1-126-025-11	ELECT	330uF	20%	25V
C280	1-130-471-00	MYLAR	0.001uF	5%	50V
C281	1-102-518-11	CERAMIC	33PF	5%	50V
C282	1-161-379-00	CERAMIC	0.01uF	20%	25V
C283	1-110-335-11	MYLAR	100PF	5%	50V
C284	1-130-467-00	MYLAR	470PF	5%	50V
C285	1-110-340-11	MYLAR	270PF	5%	50V
C286	1-110-340-11	MYLAR	270PF	5%	50V
C287	1-126-025-11	ELECT	330uF	20%	25V
C288	1-130-475-00	MYLAR	0.0022uF	5%	50V
					(AEP, E)
C288	1-110-335-11	MYLAR	100PF	5%	50V
					(German, Italian)
C289	1-126-025-11	ELECT	330uF	20%	25V
C301	1-124-902-00	ELECT	0.47uF	20%	50V
C302	1-124-903-11	ELECT	1uF	20%	50V
C303	1-136-161-00	FILM	0.047uF	5%	50V
C304	1-124-903-11	ELECT	1uF	20%	50V
C305	1-124-903-11	ELECT	1uF	20%	50V
C306	1-130-483-00	MYLAR	0.01uF	5%	50V
C307	1-124-902-00	ELECT	0.47uF	20%	50V
C308	1-104-319-11	POLYSTYRENE	0.01uF	10%	50V
C309	1-130-483-00	MYLAR	0.01uF	5%	50V
C310	1-124-252-00	ELECT	0.33uF	20%	50V
C311	1-124-463-00	ELECT	0.1uF	20%	50V
C312	1-124-902-00	ELECT	0.47uF	20%	50V
C313	1-104-271-11	POLYSTYRENE	750PF	5%	50V
C314	1-104-271-11	POLYSTYRENE	750PF	5%	50V
C315	1-102-953-00	CERAMIC	18PF	5%	50V
C316	1-102-953-00	CERAMIC	18PF	5%	50V
C317	1-124-997-11	ELECT	470uF	20%	10V
C318	1-126-104-11	ELECT	470uF	20%	35V
C319	1-130-475-00	MYLAR	0.0022uF	5%	50V
C320	1-130-475-00	MYLAR	0.0022uF	5%	50V
C321	1-126-023-11	ELECT	100uF	20%	25V
C322	1-126-023-11	ELECT	100uF	20%	25V
C323	1-126-025-11	ELECT	330uF	20%	25V
C324	1-124-929-11	ELECT	22uF	20%	100V
C325	1-124-929-11	ELECT	22uF	20%	100V
C326	1-136-166-00	FILM	0.12uF	5%	50V
C327	1-126-059-11	ELECT	10uF	20%	50V
C330	1-124-130-00	ELECT	100uF	20%	63V
C331	1-124-903-11	ELECT	1uF	20%	50V

Ref.No.	Part No.	Description			Remark
C332	1-130-471-00	MYLAR	0.001uF	5%	50V (German, Italian)
C333	1-130-471-00	MYLAR	0.001uF	5%	50V (German, Italian)
C351	1-110-335-11	MYLAR	100PF	5%	50V
C352	1-126-059-11	ELECT	10uF	20%	50V
C371	1-110-335-11	MYLAR	100PF	5%	50V
C372	1-126-059-11	ELECT	10uF	20%	50V
C401	1-124-903-11	ELECT	1uF	20%	50V
C402	1-161-379-00	CERAMIC	0.01uF	20%	25V
C403	1-161-379-00	CERAMIC	0.01uF	20%	25V
C404	1-161-379-00	CERAMIC	0.01uF	20%	25V
C405	1-126-051-11	ELECT	47uF	20%	35V
C406	1-161-379-00	CERAMIC	0.01uF	20%	25V
C407	1-161-379-00	CERAMIC	0.01uF	20%	25V
C408	1-161-379-00	CERAMIC	0.01uF	20%	25V
C409	1-161-379-00	CERAMIC	0.01uF	20%	25V
C410	1-123-382-00	ELECT	3.3uF	20%	100V
C411	1-126-023-11	ELECT	100uF	20%	25V
C412	1-161-379-00	CERAMIC	0.01uF	20%	25V
C413	1-124-903-11	ELECT	1uF	20%	50V
C414	1-124-903-11	ELECT	1uF	20%	50V
C415	1-124-927-11	ELECT	4.7uF	20%	100V
C416	1-161-379-00	CERAMIC	0.01uF	20%	25V
C417	1-162-294-31	CERAMIC	0.001uF	10%	50V
C418	1-162-215-31	CERAMIC	47PF	5%	50V
C419	1-161-379-00	CERAMIC	0.01uF	20%	25V
C420	1-162-291-31	CERAMIC	560PF	10%	50V
C421	1-124-902-00	ELECT	0.47uF	20%	50V
C451	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, German, Italian)
C452	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, German, Italian)
C453	1-161-374-11	CERAMIC	0.0015uF	20%	50V (AEP, German, Italian)
C454	1-161-374-11	CERAMIC	0.0015uF	20%	50V (AEP, German, Italian)
C455	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, German, Italian)
C501	1-161-379-00	CERAMIC	0.01uF	20%	25V
C502	1-102-959-00	CERAMIC	22PF	5%	50V
C503	1-102-959-00	CERAMIC	22PF	5%	50V
C504	1-161-379-00	CERAMIC	0.01uF	20%	25V
C505	1-161-379-00	CERAMIC	0.01uF	20%	25V
C506	1-161-379-00	CERAMIC	0.01uF	20%	25V
C507	1-161-379-00	CERAMIC	0.01uF	20%	25V
C511	1-126-059-11	ELECT	10uF	20%	50V
C512	1-126-059-11	ELECT	10uF	20%	50V
C516	1-124-484-11	ELECT	220uF	20%	35V

Ref.No.	Part No.	Description			Remark
C521	1-126-059-11	ELECT	10uF	20%	50V
C522	1-123-382-00	ELECT	3.3uF	20%	100V
C523	1-124-254-00	ELECT	0.68uF	20%	50V
C524	1-124-463-00	ELECT	0.1uF	20%	50V
C551	1-126-059-11	ELECT	10uF	20%	50V (AEP, German, Italian)
C552	1-124-252-00	ELECT	0.33uF	20%	50V (AEP, German, Italian)
C553	1-124-902-00	ELECT	0.47uF	20%	50V (AEP, German, Italian)
C554	1-130-483-00	MYLAR	0.01uF	5%	50V (AEP, German, Italian)
C601	1-123-382-00	ELECT	3.3uF	20%	100V
C602	1-161-379-00	CERAMIC	0.01uF	20%	25V
C603	1-161-379-00	CERAMIC	0.01uF	20%	25V
C604	1-126-059-11	ELECT	10uF	20%	50V
C605	1-125-548-11	CAP, DOUBLE LAYERS			0.1F
C606	1-161-379-00	CERAMIC	0.01uF	20%	25V
C607	1-161-379-00	CERAMIC	0.01uF	20%	25V
C901	1-164-096-11	CERAMIC	0.01uF		50V
C902	1-164-096-11	CERAMIC	0.01uF		50V
C903	1-164-096-11	CERAMIC	0.01uF		50V
C904	1-164-096-11	CERAMIC	0.01uF		50V
C905	1-125-714-11	ELECT	2200uF	20%	63V
C906	1-126-023-11	ELECT	100uF	20%	25V
C907	1-126-067-11	ELECT	1000uF	20%	63V
C910	1-130-789-00	FILM	1uF	5%	100V
C911	1-164-096-11	CERAMIC	0.01uF		50V
C912	1-164-096-11	CERAMIC	0.01uF		50V
C913	1-164-096-11	CERAMIC	0.01uF		50V
C914	1-164-096-11	CERAMIC	0.01uF		50V
C915	1-126-104-11	ELECT	470uF	20%	35V
C916	1-126-051-11	ELECT	47uF	20%	35V
C917	1-126-023-11	ELECT	100uF	20%	25V
C921	1-164-096-11	CERAMIC	0.01uF		50V
C922	1-124-920-11	ELECT	330uF	20%	50V
C923	1-126-051-11	ELECT	47uF	20%	50V
C924	1-126-051-11	ELECT	47uF	20%	50V
C931	1-164-096-11	CERAMIC	0.01uF		50V
C932	1-124-920-11	ELECT	330uF	20%	50V
C933	1-126-051-11	ELECT	47uF	20%	35V
C934	1-126-051-11	ELECT	47uF	20%	35V

< FILTER >

CF201	1-567-389-11	FILTER, CERAMIC
CF202	1-567-389-11	FILTER, CERAMIC
CF203	1-567-389-11	FILTER, CERAMIC
CF204	1-567-107-71	FILTER, CERAMIC
CF301	1-567-250-11	OSCILLATOR, CERAMIC

TUNER

Ref.No.	Part No.	Description	Remark
CF401	1-527-981-00	FILTER, CERAMIC	
CF402	1-527-826-00	FILTER, CERAMIC	
CF403	1-527-937-00	FILTER, CERAMIC	
		< CONNECTOR >	
*CN901	1-560-062-00	PIN, CONNECTOR 4P	
*CNP701	1-506-608-11	PIN, CONNECTOR 10P	
*CNP702	1-506-608-11	PIN, CONNECTOR 10P	
*CNP703	1-506-608-11	PIN, CONNECTOR 10P	
*CNP704	1-564-338-00	PIN, CONNECTOR 4P	
*CNP705	1-564-337-00	PIN, CONNECTOR 3P	
		< JACK >	
CNJ301	1-563-560-11	JACK, PIN 2P (OUTPUT)	
		< TRIMMER >	
CT101	1-141-304-21	CAP, TRIMMER 10PF	
CT102	1-141-304-21	CAP, TRIMMER 10PF	
CT103	1-141-304-21	CAP, TRIMMER 10PF	
CT271	1-141-232-00	CAP, TRIMMER	
		< DIODE >	
D101	8-719-901-59	DIODE KV1320	
D102	8-719-901-59	DIODE KV1320	
D103	8-719-901-59	DIODE KV1320	
D104	8-719-901-59	DIODE KV1320	
D151	8-719-987-63	DIODE 1N4148M	
D152	8-719-987-63	DIODE 1N4148M	
D201	8-719-987-63	DIODE 1N4148M	
D202	8-719-987-63	DIODE 1N4148M	
D203	8-719-987-63	DIODE 1N4148M	
D241	8-719-022-21	DIODE 1T22A	
D242	8-719-022-21	DIODE 1T22A	
D261	8-719-987-63	DIODE 1N4148M	
D273	8-719-010-42	DIODE UZ-5.6BSB	
D274	8-719-010-42	DIODE UZ-5.6BSB	
D275	8-719-936-88	DIODE SVC333-M1-SONY	
D276	8-719-987-63	DIODE 1N4148M	
D277	8-719-987-63	DIODE 1N4148M	
D278	8-719-987-63	DIODE 1N4148M	
D279	8-719-987-63	DIODE 1N4148M	
D301	8-719-987-63	DIODE 1N4148M	
D302	8-719-987-63	DIODE 1N4148M	
D303	8-719-987-63	DIODE 1N4148M	
D304	8-719-987-63	DIODE 1N4148M	
D305	8-719-987-63	DIODE 1N4148M	
D307	8-719-987-63	DIODE 1N4148M	
D310	8-719-987-63	DIODE 1N4148M	

Ref.No.	Part No.	Description	Remark
D311	8-719-987-63	DIODE 1N4148M	
D312	8-719-987-63	DIODE 1N4148M	
D313	8-719-933-33	DIODE HZS6A1L	
D401	8-719-987-63	DIODE 1N4148M	
D402	8-719-987-63	DIODE 1N4148M	
D511	8-719-933-33	DIODE HZS6A1L	
D601	8-719-987-63	DIODE 1N4148M	
D602	8-719-987-63	DIODE 1N4148M	
D603	8-719-987-63	DIODE 1N4148M	
D604	8-719-987-63	DIODE 1N4148M	
D605	8-719-987-63	DIODE 1N4148M	
D606	8-719-987-63	DIODE 1N4148M	
D607	8-719-987-63	DIODE 1N4148M	
D608	8-719-987-63	DIODE 1N4148M	
D609	8-719-987-63	DIODE 1N4148M	
D610	8-719-987-63	DIODE 1N4148M	
D611	8-719-987-63	DIODE 1N4148M	
D612	8-719-987-63	DIODE 1N4148M	
D613	8-719-987-63	DIODE 1N4148M	
D614	8-719-987-63	DIODE 1N4148M	
D615	8-719-987-63	DIODE 1N4148M	
D616	8-719-987-63	DIODE 1N4148M	
D617	8-719-987-63	DIODE 1N4148M	
D618	8-719-987-63	DIODE 1N4148M	
D619	8-719-987-63	DIODE 1N4148M	
D620	8-719-987-63	DIODE 1N4148M	
D621	8-719-987-63	DIODE 1N4148M	
D622	8-719-987-63	DIODE 1N4148M	
D623	8-719-987-63	DIODE 1N4148M	
D624	8-719-987-63	DIODE 1N4148M	
D625	8-719-987-63	DIODE 1N4148M	
D626	8-719-987-63	DIODE 1N4148M (AEP, German, Italian)	
D628	8-719-987-63	DIODE 1N4148M (AEP, German)	
D901	8-719-200-82	DIODE 11ES2	
D902	8-719-200-82	DIODE 11ES2	
D903	8-719-200-82	DIODE 11ES2	
D904	8-719-200-82	DIODE 11ES2	
D905	8-719-933-33	DIODE HZS6A1L	
D911	8-719-200-82	DIODE 11ES2	
D912	8-719-200-82	DIODE 11ES2	
D913	8-719-200-82	DIODE 11ES2	
D914	8-719-200-82	DIODE 11ES2	
D921	8-719-200-82	DIODE 11ES2	
D922	8-719-934-22	DIODE HZS30-2L	
D931	8-719-200-82	DIODE 11ES2	
D932	8-719-002-06	DIODE UZL-18L	

Ref.No.	Part No.	Description	Remark
		< FRONTEND >	
FE401	1-236-559-11	ENCAPSULATED COMPONENT (AEP, German, Italian)	
FE401	1-239-042-11	ENCAPSULATED COMPONENT (MW RF)	(E)
FE451	1-239-043-11	ENCAPSULATED COMPONENT (LW RF) (AEP, German, Italian)	
		< IC >	
IC201	8-759-111-72	IC uPC1163HA	
IC202	8-759-111-72	IC uPC1163HA	
IC251	8-759-812-35	IC LA1235	
IC271	8-759-111-72	IC uPC1163HA	
IC272	8-759-602-01	IC M5220P	
IC301	8-759-802-57	IC CXA1064S	
IC351	8-759-602-01	IC M5220P	
IC401	8-759-812-45	IC LA1245	
IC501	8-757-925-20	IC CX-7925B	
IC601	8-759-161-55	IC uPD75116HGC-011-AB8	
IC602	8-759-140-11	IC uPD4011BC	
IC911	8-759-820-09	IC LA5667	
		< IFT >	
IFT101	1-404-666-11	COIL, FM IFT	
IFT201	1-404-665-11	COIL, FM IFT (2)	
IFT202	1-404-665-11	COIL, FM IFT (2)	
IFT203	1-404-665-11	COIL, FM IFT (2)	
IFT204	1-404-665-11	COIL, FM IFT (2)	
IFT251	1-404-669-11	COIL, DISCRIMINATOR	
IFT271	1-404-668-11	COIL, FM DET (1)	
IFT272	1-404-667-11	COIL, FM DET (2)	
IFT401	1-404-326-00	TRANSFORMER, IF	
		< COIL >	
L101	1-402-240-11	COIL (ANT)	
L102	1-426-249-11	COIL (RF)	
L103	1-459-647-11	COIL (WITH CORE)	
L104	1-459-618-11	COIL	
L105	1-410-967-11	INDUCTOR 2.2uH	
L106	1-410-501-11	INDUCTOR 2.2uH	
L107	1-410-438-11	INDUCTOR 390uH	
L108	1-410-977-11	INDUCTOR 100uH	
L201	1-410-977-11	INDUCTOR 100uH	
L202	1-410-977-11	INDUCTOR 100uH	
L203	1-410-977-11	INDUCTOR 100uH	
L251	1-410-781-11	INDUCTOR 33mH	
L252	1-410-781-11	INDUCTOR 33mH	
L271	1-410-978-11	INDUCTOR 150uH	
L301	1-409-413-11	COIL (TUNING)	

Ref.No.	Part No.	Description	Remark
L302	1-410-971-11	INDUCTOR 10uH	(German, Italian)
L303	1-410-971-11	INDUCTOR 10uH	(German, Italian)
L451	1-410-979-11	INDUCTOR 220uH	(AEP, German, Italian)
L452	1-410-977-11	INDUCTOR 100uH	(AEP, German, Italian)
		< FILTER >	
LPF201	1-235-892-11	FILTER, LOW PASS	(German, Italian)
LPF301	1-236-560-11	ENCAPSULATED COMPONENT (LPF)	
		< TRANSISTOR >	
Q101	8-729-200-55	TRANSISTOR 2SK241-Y	
Q102	8-729-144-76	TRANSISTOR 3SK122K	
Q103	8-729-216-13	TRANSISTOR 2SK161-GR	
Q104	8-729-216-13	TRANSISTOR 2SK161-GR	
Q105	8-729-216-13	TRANSISTOR 2SK161-GR	
Q151	8-729-904-39	TRANSISTOR DTC114TS	
Q152	8-729-904-39	TRANSISTOR DTC114TS	
Q201	8-729-800-43	TRANSISTOR 2SK152-3	
Q202	8-729-904-39	TRANSISTOR DTC114TS	
Q203	8-729-904-39	TRANSISTOR DTC114TS	
Q204	8-729-904-39	TRANSISTOR DTC114TS	
Q205	8-729-904-39	TRANSISTOR DTC114TS	
Q206	8-729-904-39	TRANSISTOR DTC114TS	
Q207	8-729-904-39	TRANSISTOR DTC114TS	
Q208	8-729-904-39	TRANSISTOR DTC114TS	
Q211	8-729-200-55	TRANSISTOR 2SK241-Y	
Q212	8-729-900-89	TRANSISTOR DTC144ES	
Q213	8-729-230-99	TRANSISTOR 2SC2669OY-TPE4	
Q215	8-729-230-99	TRANSISTOR 2SC2669OY-TPE4	
Q216	8-729-230-99	TRANSISTOR 2SC2669OY-TPE4	
Q231	8-729-900-89	TRANSISTOR DTC144ES	
Q232	8-729-904-39	TRANSISTOR DTC114TS	
Q233	8-729-904-39	TRANSISTOR DTC114TS	
Q234	8-729-900-65	TRANSISTOR DTA144ES	
Q235	8-729-900-89	TRANSISTOR DTC144ES	
Q241	8-729-230-99	TRANSISTOR 2SC2669OY-TPE4	
Q251	8-729-201-56	TRANSISTOR 2SK246-GR2	
Q252	8-729-900-89	TRANSISTOR DTC144ES	
Q253	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q254	8-729-900-89	TRANSISTOR DTC144ES	
Q255	8-729-806-24	TRANSISTOR 2SC3899	
Q256	8-729-900-89	TRANSISTOR DTC144ES	
Q271	8-729-802-43	TRANSISTOR 2SK125-3	
Q272	8-729-201-56	TRANSISTOR 2SK246-GR2	
Q301	8-729-806-24	TRANSISTOR 2SC3899	
Q302	8-729-900-89	TRANSISTOR DTC144ES	
Q303	8-729-900-89	TRANSISTOR DTC144ES	

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Ref.No.	Part No.	Description		Remark
Q304	8-729-900-65	TRANSISTOR	DTA144ES	
Q305	8-729-201-56	TRANSISTOR	2SK246-GR2	
Q306	8-729-201-56	TRANSISTOR	2SK246-GR2	
Q308	8-729-141-30	TRANSISTOR	2SC3623A-LK	
Q309	8-729-141-30	TRANSISTOR	2SC3623A-LK	
Q310	8-729-900-65	TRANSISTOR	DTA144ES	
Q401	8-729-900-89	TRANSISTOR	DTC144ES	
Q402	8-729-904-39	TRANSISTOR	DTC114TS	
Q403	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q404	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q405	8-729-904-39	TRANSISTOR	DTC114TS	
Q406	8-729-806-24	TRANSISTOR	2SC3899	
Q407	8-729-201-56	TRANSISTOR	2SK246-GR2	
Q408	8-729-806-24	TRANSISTOR	2SC3899	
Q451	8-729-216-13	TRANSISTOR	2SK161-GR (AEP, German, Italian)	
Q452	8-729-216-13	TRANSISTOR	2SK161-GR (AEP, German, Italian)	
Q453	8-729-900-89	TRANSISTOR	DTC144ES (AEP, German, Italian)	
Q454	8-729-900-89	TRANSISTOR	DTC144ES (AEP, German, Italian)	
Q455	8-729-900-89	TRANSISTOR	DTC144ES (AEP, German, Italian)	
Q456	8-729-141-32	TRANSISTOR	2SA1409-LK (AEP, German, Italian)	
Q457	8-729-141-30	TRANSISTOR	2SC3623A-LK (AEP, German, Italian)	
Q458	8-729-900-89	TRANSISTOR	DTC144ES (AEP, German, Italian)	
Q459	8-729-900-89	TRANSISTOR	DTC144ES (AEP, German, Italian)	
Q501	8-729-900-89	TRANSISTOR	DTC144ES	
Q502	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q503	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q511	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q521	8-729-203-05	TRANSISTOR	2SK30A-GR3	
Q522	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q551	8-729-203-05	TRANSISTOR	2SK30A-GR3 (AEP, German, Italian)	
Q552	8-729-119-78	TRANSISTOR	2SC2785-HFE (AEP, German, Italian)	
Q601	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q602	8-729-141-30	TRANSISTOR	2SC3623A-LK (E)	
Q603	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q901	8-729-127-53	TRANSISTOR	2SC2275-P	
Q902	8-729-281-53	TRANSISTOR	2SC1815-GR	
Q903	8-729-281-53	TRANSISTOR	2SC1815-GR	
Q904	8-729-201-56	TRANSISTOR	2SK246-GR2	
Q921	8-729-140-96	TRANSISTOR	2SD774-34	
Q931	8-729-140-97	TRANSISTOR	2SB734-34	

< RESISTOR >

Ref.No.	Part No.	Description				Remark
R101	1-249-437-11	CARBON	47K	5%	1/4W	
R102	1-249-437-11	CARBON	47K	5%	1/4W	
R103	1-249-437-11	CARBON	47K	5%	1/4W	
R104	1-249-405-11	CARBON	100	5%	1/4W	
R105	1-249-437-11	CARBON	47K	5%	1/4W	
R106	1-249-437-11	CARBON	47K	5%	1/4W	
R107	1-249-399-11	CARBON	33	5%	1/4W	
R108	1-249-441-11	CARBON	100K	5%	1/4W	
R109	1-249-441-11	CARBON	100K	5%	1/4W	
R110	1-249-441-11	CARBON	100K	5%	1/4W	
R111	1-249-405-11	CARBON	100	5%	1/4W	
R112	1-249-405-11	CARBON	100	5%	1/4W	
R114	1-249-431-11	CARBON	15K	5%	1/4W	
R115	1-249-437-11	CARBON	47K	5%	1/4W	
R116	1-249-405-11	CARBON	100	5%	1/4W	
R117	1-249-411-11	CARBON	330	5%	1/4W	
R118	1-249-437-11	CARBON	47K	5%	1/4W	
⚠R119	1-249-405-11	CARBON	100	5%	1/4W	F
R151	1-249-721-11	CARBON	100K	5%	1/2W	
R152	1-249-721-11	CARBON	100K	5%	1/2W	
R153	1-249-404-00	CARBON	82	5%	1/4W	
R154	1-249-404-00	CARBON	82	5%	1/4W	
R155	1-249-398-11	CARBON	27	5%	1/4W	
R156	1-247-800-11	CARBON	51	5%	1/4W	
R157	1-247-800-11	CARBON	51	5%	1/4W	
R201	1-249-411-11	CARBON	330	5%	1/4W	
R202	1-249-411-11	CARBON	330	5%	1/4W	
⚠R203	1-249-393-11	CARBON	10	5%	1/4W	F
R204	1-249-411-11	CARBON	330	5%	1/4W	
R205	1-249-405-11	CARBON	100	5%	1/4W	
R206	1-249-411-11	CARBON	330	5%	1/4W	
⚠R207	1-249-393-11	CARBON	10	5%	1/4W	F
R208	1-249-411-11	CARBON	330	5%	1/4W	
R209	1-249-405-11	CARBON	100	5%	1/4W	
R210	1-249-413-11	CARBON	470	5%	1/4W	
⚠R211	1-249-393-11	CARBON	10	5%	1/4W	F
R212	1-249-422-11	CARBON	2.7K	5%	1/4W	
R213	1-249-422-11	CARBON	2.7K	5%	1/4W	
R217	1-249-411-11	CARBON	330	5%	1/4W	
R218	1-249-409-11	CARBON	220	5%	1/4W	
R219	1-249-405-11	CARBON	100	5%	1/4W	
R220	1-249-411-11	CARBON	330	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
R221	1-249-395-11	CARBON	15	5%	1/4W	
R222	1-249-409-11	CARBON	220	5%	1/4W	
R223	1-249-441-11	CARBON	100K	5%	1/4W	
R224	1-249-411-11	CARBON	330	5%	1/4W	
R225	1-249-429-11	CARBON	10K	5%	1/4W	
R226	1-249-434-11	CARBON	27K	5%	1/4W	
⚠R227	1-249-393-11	CARBON	10	5%	1/4W	F
R228	1-249-417-11	CARBON	1K	5%	1/4W	
R229	1-249-431-11	CARBON	15K	5%	1/4W	
R230	1-249-434-11	CARBON	27K	5%	1/4W	
R231	1-249-428-11	CARBON	8.2K	5%	1/4W	
R232	1-249-429-11	CARBON	10K	5%	1/4W	
R233	1-249-429-11	CARBON	10K	5%	1/4W	
R234	1-249-429-11	CARBON	10K	5%	1/4W	
R241	1-247-895-00	CARBON	470K	5%	1/4W	
R242	1-249-417-11	CARBON	1K	5%	1/4W	
R243	1-249-437-11	CARBON	47K	5%	1/4W	
R244	1-249-437-11	CARBON	47K	5%	1/4W	
R251	1-249-411-11	CARBON	330	5%	1/4W	
R252	1-249-441-11	CARBON	100K	5%	1/4W	
R253	1-249-432-11	CARBON	18K	5%	1/4W	
R254	1-247-903-00	CARBON	1M	5%	1/4W	
R255	1-249-434-11	CARBON	27K	5%	1/4W	
R256	1-249-430-11	CARBON	12K	5%	1/4W	
R257	1-249-417-11	CARBON	1K	5%	1/4W	
R258	1-249-425-11	CARBON	4.7K	5%	1/4W	
⚠R259	1-249-405-11	CARBON	100	5%	1/4W	F
R260	1-249-438-11	CARBON	56K	5%	1/4W	
R261	1-249-441-11	CARBON	100K	5%	1/4W	
R262	1-249-437-11	CARBON	47K	5%	1/4W	
R263	1-249-437-11	CARBON	47K	5%	1/4W	
R264	1-249-433-11	CARBON	22K	5%	1/4W	
R265	1-249-437-11	CARBON	47K	5%	1/4W	
R266	1-249-437-11	CARBON	47K	5%	1/4W	
R271	1-249-421-11	CARBON	2.2K	5%	1/4W	
R272	1-249-411-11	CARBON	330	5%	1/4W	
R273	1-249-417-11	CARBON	1K	5%	1/4W	
⚠R274	1-249-393-11	CARBON	10	5%	1/4W	F
R275	1-249-417-11	CARBON	1K	5%	1/4W	
R276	1-249-417-11	CARBON	1K	5%	1/4W	
R277	1-249-417-11	CARBON	1K	5%	1/4W	
R278	1-249-417-11	CARBON	1K	5%	1/4W	
⚠R279	1-249-409-11	CARBON	220	5%	1/4W	F
R280	1-249-441-11	CARBON	100K	5%	1/4W	
R281	1-249-409-11	CARBON	220	5%	1/4W	
R282	1-249-410-11	CARBON	270	5%	1/4W	
R283	1-249-417-11	CARBON	1K	5%	1/4W	
R284	1-249-434-11	CARBON	27K	5%	1/4W	

Ref.No.	Part No.	Description				Remark
R285	1-249-429-11	CARBON	10K	5%	1/4W	
R286	1-249-429-11	CARBON	10K	5%	1/4W	
R287	1-249-422-11	CARBON	2.7K	5%	1/4W	
R288	1-249-413-11	CARBON	470	5%	1/4W	
R289	1-247-903-00	CARBON	1M	5%	1/4W	
R290	1-249-417-11	CARBON	1K	5%	1/4W	(AEP,E)
R291	1-249-418-11	CARBON	1.2K	5%	1/4W	(AEP,E)
R291	1-249-434-11	CARBON	27K	5%	1/4W	(German, Italian)
⚠R292	1-249-405-11	CARBON	100	5%	1/4W	F
R293	1-249-426-11	CARBON	5.6K	5%	1/4W	(German, Italian)
R294	1-249-432-11	CARBON	18K	5%	1/4W	(German, Italian)
⚠R301	1-249-393-11	CARBON	10	5%	1/4W	F
R302	1-249-423-11	CARBON	3.3K	5%	1/4W	
R303	1-249-431-11	CARBON	15K	5%	1/4W	
R304	1-249-427-11	CARBON	6.8K	5%	1/4W	
R305	1-249-428-11	CARBON	8.2K	5%	1/4W	
R306	1-249-441-11	CARBON	100K	5%	1/4W	
R307	1-247-886-11	CARBON	200K	5%	1/4W	
R308	1-249-441-11	CARBON	100K	5%	1/4W	
R309	1-247-886-11	CARBON	200K	5%	1/4W	
R310	1-247-887-00	CARBON	220K	5%	1/4W	
R311	1-247-887-00	CARBON	220K	5%	1/4W	
R312	1-249-399-11	CARBON	33	5%	1/4W	
R313	1-249-399-11	CARBON	33	5%	1/4W	
R314	1-249-417-11	CARBON	1K	5%	1/4W	
R315	1-249-417-11	CARBON	1K	5%	1/4W	
R316	1-249-437-11	CARBON	47K	5%	1/4W	
R317	1-249-437-11	CARBON	47K	5%	1/4W	
R318	1-249-429-11	CARBON	10K	5%	1/4W	
R319	1-247-903-00	CARBON	1M	5%	1/4W	
R320	1-247-903-00	CARBON	1M	5%	1/4W	
R321	1-249-429-11	CARBON	10K	5%	1/4W	
R322	1-249-429-11	CARBON	10K	5%	1/4W	
R323	1-249-417-11	CARBON	1K	5%	1/4W	
R324	1-249-417-11	CARBON	1K	5%	1/4W	
R325	1-249-405-11	CARBON	100	5%	1/4W	
⚠R327	1-249-401-11	CARBON	47	5%	1/4W	F
R328	1-249-429-11	CARBON	10K	5%	1/4W	
R329	1-249-436-11	CARBON	39K	5%	1/4W	
R351	1-249-426-11	CARBON	5.6K	5%	1/4W	
R352	1-249-426-11	CARBON	5.6K	5%	1/4W	
R353	1-249-424-11	CARBON	3.9K	5%	1/4W	
R371	1-249-426-11	CARBON	5.6K	5%	1/4W	
R372	1-249-426-11	CARBON	5.6K	5%	1/4W	
R373	1-249-424-11	CARBON	3.9K	5%	1/4W	
R401	1-249-429-11	CARBON	10K	5%	1/4W	

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TUNER

Ref.No.	Part No.	Description				Remark
R402	1-249-421-11	CARBON	2.2K	5%	1/4W	
⚠R403	1-249-409-11	CARBON	220	5%	1/4W	F
R404	1-249-413-11	CARBON	470	5%	1/4W	
R405	1-249-429-11	CARBON	10K	5%	1/4W	
R406	1-249-429-11	CARBON	10K	5%	1/4W	
R407	1-249-405-11	CARBON	100	5%	1/4W	
R408	1-249-404-00	CARBON	82	5%	1/4W	
R409	1-249-424-11	CARBON	3.9K	5%	1/4W	
⚠R410	1-249-407-11	CARBON	150	5%	1/4W	F
R411	1-249-422-11	CARBON	2.7K	5%	1/4W	
R412	1-249-429-11	CARBON	10K	5%	1/4W	
R413	1-249-441-11	CARBON	100K	5%	1/4W	
R414	1-249-430-11	CARBON	12K	5%	1/4W	
R415	1-249-430-11	CARBON	12K	5%	1/4W	
R416	1-249-422-11	CARBON	2.7K	5%	1/4W	
R417	1-249-426-11	CARBON	5.6K	5%	1/4W	
R418	1-249-433-11	CARBON	22K	5%	1/4W	
R419	1-249-429-11	CARBON	10K	5%	1/4W	
R420	1-247-903-00	CARBON	1M	5%	1/4W	
R451	1-249-441-11	CARBON	100K	5%	1/4W	
			(AEP, German, Italian)			
R452	1-249-421-11	CARBON	2.2K	5%	1/4W	
			(AEP, German, Italian)			
R453	1-249-417-11	CARBON	1K	5%	1/4W	
			(AEP, German, Italian)			
R454	1-249-433-11	CARBON	22K	5%	1/4W	
			(AEP, German, Italian)			
R455	1-249-433-11	CARBON	22K	5%	1/4W	
			(AEP, German, Italian)			
R456	1-247-903-00	CARBON	1M	5%	1/4W	
			(AEP, German, Italian)			
R457	1-249-429-11	CARBON	10K	5%	1/4W	
			(AEP, German, Italian)			
R501	1-249-429-11	CARBON	10K	5%	1/4W	
R502	1-249-429-11	CARBON	10K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-249-423-11	CARBON	3.3K	5%	1/4W	
R505	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R511	1-249-409-11	CARBON	220	5%	1/4W	F
R512	1-249-421-11	CARBON	2.2K	5%	1/4W	
⚠R516	1-249-408-11	CARBON	180	5%	1/4W	F
R521	1-249-414-11	CARBON	560	5%	1/4W	
R522	1-249-414-11	CARBON	560	5%	1/4W	
R523	1-249-418-11	CARBON	1.2K	5%	1/4W	
R524	1-249-411-11	CARBON	330	5%	1/4W	
R525	1-249-420-11	CARBON	1.8K	5%	1/4W	
R526	1-249-427-11	CARBON	6.8K	5%	1/4W	
R527	1-249-425-11	CARBON	4.7K	5%	1/4W	
R528	1-249-417-11	CARBON	1K	5%	1/4W	

Ref.No.	Part No.	Description				Remark
R529	1-249-415-11	CARBON	680	5%	1/4W	
R530	1-249-425-11	CARBON	4.7K	5%	1/4W	
R551	1-249-429-11	CARBON	10K	5%	1/4W	
			(AEP, German, Italian)			
R552	1-249-414-11	CARBON	560	5%	1/4W	
			(AEP, German, Italian)			
R553	1-249-418-11	CARBON	1.2K	5%	1/4W	
			(AEP, German, Italian)			
R554	1-249-411-11	CARBON	330	5%	1/4W	
			(AEP, German, Italian)			
R555	1-249-441-11	CARBON	100K	5%	1/4W	
			(AEP, German, Italian)			
R556	1-249-427-11	CARBON	6.8K	5%	1/4W	
			(AEP, German, Italian)			
R557	1-249-425-11	CARBON	4.7K	5%	1/4W	
			(AEP, German, Italian)			
R601	1-249-433-11	CARBON	22K	5%	1/4W	
R602	1-249-433-11	CARBON	22K	5%	1/4W	
R603	1-249-433-11	CARBON	22K	5%	1/4W	
R608	1-249-429-11	CARBON	10K	5%	1/4W	
R609	1-249-429-11	CARBON	10K	5%	1/4W	
R611	1-249-429-11	CARBON	10K	5%	1/4W	
R614	1-249-437-11	CARBON	47K	5%	1/4W	
R615	1-249-429-11	CARBON	10K	5%	1/4W	
R616	1-249-433-11	CARBON	22K	5%	1/4W	
R617	1-249-433-11	CARBON	22K	5%	1/4W	
R618	1-249-433-11	CARBON	22K	5%	1/4W	
R619	1-249-433-11	CARBON	22K	5%	1/4W	
R624	1-247-895-00	CARBON	470K	5%	1/4W	
R625	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R626	1-249-401-11	CARBON	47	5%	1/4W	F
R627	1-249-417-11	CARBON	1K	5%	1/4W	
R628	1-249-441-11	CARBON	100K	5%	1/4W	(E)
R629	1-247-883-00	CARBON	150K	5%	1/4W	
R630	1-249-433-11	CARBON	22K	5%	1/4W	
R631	1-249-429-11	CARBON	10K	5%	1/4W	
R903	1-249-409-11	CARBON	220	5%	1/4W	
R904	1-249-429-11	CARBON	10K	5%	1/4W	
R905	1-249-427-11	CARBON	6.8K	5%	1/4W	
⚠R910	1-249-397-11	CARBON	22	5%	1/4W	F
R911	1-249-437-11	CARBON	47K	5%	1/4W	
⚠R921	1-249-409-11	CARBON	220	5%	1/4W	F
R922	1-249-424-11	CARBON	3.9K	5%	1/4W	
⚠R931	1-217-497-00	FUSIBLE	220	5%	1W	F
R932	1-249-425-11	CARBON	4.7K	5%	1/4W	
R933	1-247-883-00	CARBON	150K	5%	1/4W	
R934	1-249-440-11	CARBON	82K	5%	1/4W	

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Replace only with part number specified.

Ref.No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV201	1-237-460-11	RES, ADJ, CARBON 20K	
RV202	1-237-460-11	RES, ADJ, CARBON 20K	
RV203	1-237-458-21	RES, ADJ, CARBON 5K	
RV204	1-237-455-11	RES, ADJ, CARBON 500	
RV241	1-237-463-11	RES, ADJ, CARBON 200K	
RV251	1-237-459-11	RES, ADJ, CARBON 10K	
RV252	1-237-463-11	RES, ADJ, CARBON 200K	
RV301	1-237-465-11	RES, ADJ, CARBON 1M	
RV302	1-237-465-11	RES, ADJ, CARBON 1M	
RV303	1-237-461-11	RES, ADJ, CARBON 50K	
RV401	1-237-463-11	RES, ADJ, CARBON 200K	
RV402	1-237-461-11	RES, ADJ, CARBON 50K (E)	
		< RELAY >	
RY151	1-515-614-11	RELAY	
RY152	1-515-614-11	RELAY	
RY153	1-515-614-11	RELAY	
		< THERMISTOR >	
TH201	1-807-970-11	THERMISTOR	
TH202	1-808-269-11	THERMISTOR	
TH203	1-808-269-11	THERMISTOR	
TH271	1-807-972-11	THERMISTOR	
		< TERMINAL >	
TM101	1-537-352-11	TERMINAL BOARD (ANTENNA) (AEP, German, Italian)	
TM101	1-537-247-11	TERMINAL BOARD (ANT) (ANTENNA) (E)	
		< TEST PIN >	
*TP201	1-565-513-11	PIN, CONNECTOR 2P	
*TP271	1-565-513-11	PIN, CONNECTOR 2P	
*TP601	1-565-513-11	PIN, CONNECTOR 2P (E)	
*TP602	1-565-513-11	PIN, CONNECTOR 2P	
		< VIBRATOR >	
XT501	1-567-826-21	VIBRATOR, CRYSTAL (7.2MHz)	
XT601	1-577-359-21	VIBRATOR, CERAMIC (4.19MHz)	
**********			
*	1-641-161-11	VOLTAGE SELECT BOARD (E)	
		**********	
		< SWITCH >	
S952	1-572-944-11	SWITCH, POWER VOLTAGE SELECTION (VOLTAGE SELECTOR) (E)	
**********			

Ref.No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
⚠78	1-559-297-31	CODE, POWER (E)	
⚠78	1-574-383-11	CORD, POWER (AEP, G, IT)	
⚠81	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
⚠PT901	1-450-409-11	TRANSFORMER, POWER (AEP, G, IT)	
⚠PT901	1-450-410-11	TRANSFORMER, POWER (E)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-501-451-11	ANTENNA, LOOP	
	1-501-594-11	ANTENNA (FM) (AEP)	
	1-696-170-11	CORD, CONNECTION	
	3-756-692-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE, CHINIESE) (AEP, E)	
	3-756-692-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, IT)	
	3-756-692-51	MANUAL, INSTRUCTION (GERMAN) (G)	
*	4-923-472-01	CUSHION	
*	4-926-824-71	INDIVIDUAL CARTON	
**********			

HARDWARE LIST

#1	7-682-547-09	SCREW +BVTT 3X6 (S)
#2	7-682-548-09	SCREW +B 3X8
#3	7-682-549-09	SCREW +BVTT 3X10 (S)
#4	7-682-560-09	SCREW +BVTT 4X6 (S)
#5	7-682-550-04	SCREW +BVTT 3X12 (S)
#6	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT (E)
#7	7-683-255-58	SCREW, HEXAGON SOCKET

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